HERB.

SYLLOGE
FUNGORUM

OMNIUM HUCUSQUE COGNITORUM

DIGESSIT

P. A. SACCARDO

VOL. XXIV

Sectio I

SUPPLEMENTUM UNIVERSALE

Pars X

Phycomycetæ, Laboulbeniomycetæ
Pyrenomycetæ p. p.

CURANTE

ALEX. TROTTER

(Collab. P. A. et DOM. SACCARDO, G. B. TRAVERSO, A. TROTTER)

Fol. 44 — Pretium it. lib. aureis 60

ABELLINI

Die 15 Julii MCMXXVI

Sumptibus Coheredum SACCARDO

TYPIS PERGOLA

Vendit extra Italiam R. Friedländer & Sohn. Berolini

Omnia jura sunt servata

Abellini, sumptibus Coheredum Saccardo (Typis Pergola).

PHYCOMYCETÆ De Bary

Syll. VII p. 181, IX p. 335, XI p. 239, XIV p. 432, XVI p. 383, XVII p. 494, XXI p. 815.

Fam. 1. Mucoraceæ Nees em. De Bary

MUCOR Mich. — Syll. VII p. 190, IX p. 335, XI p. 239, XIV p. 432, XVI p. 383, XVII p. 494, XXI p. 815.

1. **Mucor lusitanicus** Bruderlein, Bull. Soc. Bot. Genève, 1916, p. 273-276, f. 1-2. — Hyphis sporangiferis ramosis 2-30 mm. altis, 9-17 μ cr.; sporangiis globosis 45-70 μ diam.; tunica granulosa, in aqua in fragmenta se findente, basi columellae inserta; columella sphaerico-ovoidea, 45-56 μ longa 30-40 μ lata; sporis ellipsoideis, hyalinis, 6-8 μ diam.; zygosporis ignotis; chlamydosporis frequentissimis 10-30 × 11-20; oidiosporis raris 15 × 9. 3315

   Hab. in farina M a y d i s, in valle Douro, Lusitaniae.— Affinis *Muc. racemoso* et *M. christianiensi.*

2. **Mucor pallidus** Naoumoff in litt., *Mucor* sp. Scripta botanica, fasc. XXIX p. 72 t. IX fig. 9-15. — Mycelio albo-flavido; hyphis sporangiferis erectis demum decumbentibus, vix 1 cm. altis, parce ramosis, 8-10 μ cr.; sporangiis minutis levibus, sphaericis, 40-60 μ diam., membrana diu insolubili; columella sphaerica, 35-40 μ diam., levi, diaphana, collario basi praedita; sporis ex ellipsoideo cylindraceis, utrinque rutundatis 5-6 × 2,5-3,5; zygosporis brunneis, e sphaerico oblongis 35-45 μ longis, irregulariter tuberculosis. 3316

   Hab. cultus in laboratorio botanico, Petropoli, Rossiae.

3. **Mucor spinosus** Van Tiegh. — Sacc., Syll. VII P. I, p. 191.— var. **recurvus** Grove, Journ. of Biol. v. VI, 1911, p. 39, tab. III fig. 4.— A typo differt ramulis arcuato-recurvis et ramificatione plerumque sympodiali, nec ut in tipo plerumque monopodiali. 3317

   Hab. in culturis, Birmingham, Anglia.

4. **Mucor botryoides** Lendner (deest in Syll., sed ubi descriptum ?) — var. **minor** Jensen, Fung. Fl. of Soil, Cornell Univ., Coll. of Agric., Bull. 315 (1912) p. 457, c. ic. — A typo differt sporangiis brunneo- 3318

atris, sporangiophoris crassioribus, ultra 30 μ latis, sporis minoribus omnino levibus, 4,5-8 μ diam. (typice 6 μ); chlamydosporis limoniformibus, 16-22 × 10-16.

Hab. e solo cultus, Ithaca N. Y., Amer. bor.

5. **Mucor muriperda** Sacc. et Sinig., Ann. Mycol. XI, 1913, p. 321.— 3319
Late effusus, sordide albus, mox (in Agar cultus) luride griseo-olivascens, byssino-velutinus; hyphis mycelicis dendritice repetito ramosis repentibus rarius rhizinis praeditis, hyphis primariis concoloribus erectis filiformibus 14-18 μ cr. sursum vage ramosis, distincte et frequenter septatis; ramis sursum ternatis varieae longitudinis, ascendentibus, apice sporangiophoris; sporangiis subglobosis, glabris, levibus, 30-40 μ diam., rarius usque ad 60, initio pallidis demum saturate griseo-olivaceis; columella globosa, vel ellipsoideo-globosa, levi 28 μ diam. vel 28 × 25, basi interdum fragmentis minimis tunicae sporangii cincta, olivacea; sporis exiguis, globosis v. globoso-ellipsoideis, 3,7-4,2 μ diam. v. 4,2 × 3,5-4, levibus, subhyalinis. Chlamydosporae intercalares et zygosporae rudimentales in mycelio occurrunt.

Hab. in Mure musculo var. albina, cui mortem attulit, in Laboratorio Pathologiae Chirurgicae Universitatis Mutinensis, hieme 1913. (Doct. GEORG. SINIGAGLIA).

Obs. Ad stirpem *Mucoris racemosi* videtur pertinere sed colore totius fungi mox saturate olivaceo, hyphis distincte septatis, sporis minoribus facile distinguitur. Praeterea dignoscitur quia hic valde pathogenus, dum *Mucor racemosus* innocuus experimentis nunc peractis demonstratur. Est affinis quoque *Mucori pusillo,* sed sporangia nunquam crystallis oxalati calcici conspersa. A *Mucore corymbifero* colore mox luride olivaceo, defectu apophysis sub sporangiis, sporis plerumque sphaericis etc. distinguitur.

6. **Mucor cornealis** V. Cavara et Sacc., Ann. Mycol. XI, 1913, p. 321; 3320
Cavara V., Una forma di cheratomicosi. Pavia 1913, in Annali Ottalmol. XLII fasc. 9-10, con tav. — Mycelio laxe intertexto, candido, mox (in lacte, pane, tuberoque Solani exculto) cinereo-plumbeo, temperatura + 37 C rapide et copiose se evolvente, aegre vero temp. + 15 C vel supra + 51 C; hyphis sterilibus effusis, validis, dendritice ramosis, usque ad 14-15 μ, continuis, hyalinis, apicem versus corymboso-v. racemoso-ramosis; ramulis sporangiophoris nunc alternis nunc oppositis, simplicibus v. dichotome partitis, longitudine varia, 80-300 × 7-8, plerumque sub angulo 45-60° patentibus, sursum sensim leviter incrassatis, sed sub sporangio

non coarctatis, achromis, apice fuscellis; sporangiis globosis v. subglobosis, tunica diaphana levi praeditis, 40-44 μ diam. (rarius usque ad 50-55 μ diam. et subinde tantum 15-22 μ); columella distincta, obovato-piriformi, plus minus dilute fusca, 22-24 μ lata; sporis tunica tenuissima hyalina, levigata praeditis, senio dilute flavicantibus, typice globosis, 4-4,5 μ diam., rarius globoso-ovoideis; zygosporis ignotis.

Hab. in *cornea oculari hominis,* cui pathogenus et ceratomycosis formam generans, Senis, Etruriae, Italia media, vere 1912. (Doct. Victorianus Cavara).

Obs. Sine dubio ob sporarum et sporangiorum parvitatem et ramorum dispositionem ad stirpem *Mucoris racemosi* pertinet. In primis est *Mucori Regnieri* Luc. et Cost. immo magis *M. corymbifero* affinis, sed notis allatis et praesertim vi pathogena peculiari distingui meretur.

7. **Mucor globosus** Fisch. — Sacc. Syll. XI p. 239. — Ann. Mycol. XI, 3321
1913, p. 567. — var. **intermedius** Sacc. — Caespitulis effusis, humilibus, griseo-olivascentibus; ramulis sporangiophoris saepius patenti-arcuatis, copiose septatis 14-20 μ crassis; sporangiis globosis 90-100 μ diam., brunneis; sporangiis lateralibus paullo minoribus; columella globosa 40-45 μ diam., hyalina; collario tenui saepe remanente; sporis globosis 7-8 μ diam., levibus, olivaceo-fuscellis.

Hab. in contextu pathologico pedis humani, cultus in clinica cheirurgica pisana Italiae (in tubere S o l a n i et agar), (Doct. G. Terra-Abrami). — Inter *Muc. globosum* et *M. lamprosporum* Lendn. videtur medius, a primo differt hyphis crassioribus, columella typica sphaerica, ramulis saepius curvis, sporangiis lateralibus paullo minoribus, ab altero sporarum colore, ramulis non semper recurvatis etc. A *M. sphaerosporo* dignoscitur colore numquam rubente etc.

8. **Mucor griseo-lilacinus** Povah, Bull. Torr. Bot. Club 44., p. 301, tab. 3322
18 fig. 5-10 (1917). — In pane floccum densum murino-griseum, aetate subavellaneo-tinctum, 1-1,5 cm. altum efformante; sporangiophoris 8-20 μ diam., initio simplicibus dein ramis lateralibus 1-2 iterum ramificatis praeditis, ramis semper in sporangium abeuntibus et ad basim septo transverso praeditis; sporangiis globosis vel subglobosis, 60-80 μ diam. (extremis 40-100 μ) primo luteolis dein griseo-virescentibus, membrana deliquescente limbum basalem relinquente, columella libera vel vix adnata; globosa vel subglobosa, 12-67 μ, saepius 27-43 μ diam., lilacino-griseo-tincta; sporis conformibus, ovoideis 4-6 × 3-4, raro usque ad 8 × 6 vel 10 × 5 μ

coacervatis pallide griseis ; chlamydosporis et oidiis praesentibus in hyphis, chlamydosporis e globoso doliiformibus, 10-30 μ diam., hyphis, praecipue substrato proximis membrana lilacino-tincta praeditis, contentu saepe aurantiaco-luteo ; zygosporis non visis (species verisimiliter heterothallica).

Hab. in fimo, caulibus putrescentibus, foliis corruptis, in fungis etc., in Amer. bor.

9. **Mucor varians** Povah, Bull. Torr. Bot. Club 44. p. 298, tab. 20 fig. 1-6 (1917). — In pane floccum densum ex eburneo-luteo subolivaceum v. alutaceum, 1-3,5 cm. altum efformante ; sporangiophoris 8-20 μ diam., parce vel copiose ramosis, intricatis, contortis vel convolutis, hyphis et columellis saepe proliferantibus ; sporangiis globosis vel subglobosis, levibus, 43-116 μ diam. (plerumque 60-80 μ), initio luteolis vel pallide aurantiacis demum saturate griseis, viridi-tinctis, membrana deliquescente, limbum basalem relinquente, columella libera vel tenuiter adnata, forma maxime ludibunda : subglobosa, hemisphaerica, hemisphaerico-applanata, ovali, cylindrica, elliptica, piriformi, panduriformi, subconica, 18-70 × 12-59 (med. 25-50 × 20-45), protoplasmate aurantiaco farcta vel vacua, membrana griseola ; sporis non uniformibus, ex ovoideo subellipsoideis, raro sphaericis, 4-6 × 3-4 (extremis 4-14 × 3-8) aliis irregularibus reniformibus vel cruciformibus haud raro intermixtis ; zygosporis non visis (verisim. species hetherothallica). 3323

Hab. in fimo, terra, lignis, fungis, in America bor.

10. **Mucor coprophilus** Povah, Bull, Torr. Bot. Club, 44., p. 297, tab. 19 fig. 1-5 (1917). — In pane floccum laxum griseo-olivaceum 2-2,5 cm. alto efformante ; sporangiophoris brunneis 27-46 μ diam., ramulis elongatis vel brevibus, simplicibus vel ramosis, tenuibus praeditis, ramis in sporangia tenuia saepe decidua 20-60 μ diam. abeuntibus ; sporangiis majoribus terminalibus globosis, incrustatis, 185-235 μ diam., initio albicantibus dein atris, membrana mox deliquescente (sporangis minoribus exceptis) et limbum basalem relinquente ; columella libera, e cylindrico piriformi, 110-160 × 70-113, brunneola, interdum contentu aurantiaco farcta ; sporis in sporangis majoribus stricte ellipsoideis, 13-16 × 5-6, in minoribus late ellipsoideis, 9-12 × 7-8 ; chlamydosporis raris in sporangiophoris ; zygosporis non visis (verisimiliter species heterothallica). 3324

Hab. in fimo c u n i c u l i n o , in Amer. bor. — *M. griseosporo* affinis. Huc pertinere videntur specimina in Ellis et Everh., North Amer. Fungi 972, sub nom. *M. Mucedo* distributa.

11. **Mucor abundans** Povah, Bull. Torr. Bot. Club, 44., p. 292 tab. 17 fig. 1-6 (1917). — In pane floccum densum, erectum, fumoso-griseum avellaneo-tinctum, 1,5-3,5 cm. altum efformante; sporangiophoris 8-23 μ diam., initio simplicibus dein ramulos 1-3 laterales gerentibus, ramulis ipsis iterum 1-2-vel pluries ramificatis et in sporangium abeuntibus, ramis ad basim septo praeditis; sporangiis globosis vel subglobosis, levibus vel tenuiter incrustatis, 39-98 μ diam. utplurimum 56-78 initio luteolis dein fusco-griseis, maturis viridulo-tinctis, membrana deliquescente limbum basilarem relinquente, columella e subgloboso piriformi libera v. tenuiter adnata, 21-66 × 20-55, hyalina vel griseo-tincta; sporis variabilibus, e globoso late ellipsoideis, 3-5 μ diam. vel 4-5,5 × 3-4,5 (paucis 8 × 6); chlamydosporis et globulis luteolis in mycelio submerso; zygosporis non visis (verisimiliter mycelio heterothallico). 3325

Hab. in fimo, ad terram, ad l y c o p e r s i c a putres, in Amer. bor. — *M. griseo-lilacino* et *M. hiemali* affinis.

12. **Mucor griseosporus** Povah, Bull. Torr. Bot. Club, 44., p. 297 tab. 18 fig. 1-5 (1917). — In pane floccum laxum, erectum, griseo-olivaceum, brunneo-tincto, 3-4 cm. alto efformante; sporangiophoris membrana brunneola praeditis, 20-70 μ diam., typice simplicibus vel ramulis brevibus 1-2 lateralibus in sporangia abeuntibus praeditis, in culturis vetustis septatis; sporangiis globosis, terminali 250-300 μ diam., crystallino-incrustato, lateralibus supra 100 μ diam., initio luteolis, maturis saturate griseis, membrana deliquescente (in sporangiis minoribus persistente) limbum basilarem relinquente; columella libera, piriformi, basi inflata vel panduriformi, 115-242 × 88-165, contentu plerumque pallide aurantiaco; sporis uniformibus, ellipsoideis, 8-15 × 5-8 griseis, coacervatis subatris, adglutinatis; zygosporis non visis (mycelio verisimiliter heterothallico). 3326

Hab. in fimo, in Amer. bor. — *M. piriformi* affinis.

13. **Mucor aromaticus** Povah, Bull. Torr. Bot. Club, 44., p. 296, tab. 17 fig. 7-11 (1917). — In pane floccum laxum luteo-ochraceum vel ochraceo-aurantiacum 2-3 cm. altum efformante; sporangiophoris 20-50 μ diam., typice simplicibus vel ramulos 1-3 laterales sporangiferos gerentibus; sporangiis globosis, 100-160 μ diam., crystallis minutis incrustatis, plus minusve diaphanis, membrana deliquescente, limbum basalem relinquente vel non; columella libera, e subgloboso ovali, subpiriformi, 50-120 × 43-105, contentu protoplasmatico praedita vel vacua; sporis uniformibus, ellipsoideis, 18-20 × 10 (extremis 15-35 × 7-14) raro ovatis vel subsphaericis; zygo- 3327

sporis non visis (verisimiliter mycelio heterothallico).

Hab. in fimo, in Amer. bor.— Culturae odorem aromaticum camphoraceum effundunt.

14. **Mucor rhizophilus** Gorjeonne, Flora 1911, p. 147 (nomine nobis tantum nota). 3328

BLAKESLEA Thaxt., Bot. Gaz. LVIII (1914) p. 343 — (Etym. a cl. Blakeslee biologiae sexualis Phycomycetum scrutatore). — Mycelium gossypinum, copiose chlamydosporiferum. Sporangia biformia; majora solitaria Choanophorae similia, columellâ praeditâ et sporas atras, utrinque ciliatas appendiculatas generantia; minora (sporangiola) columellâ carentia sporas paucas atras utrinque ciliato-appendiculatas gignentia et coria vesiculam capitatim disposita.

1. **Blakeslea trispora** Thaxt., l. c. t. XXVI-XXVII.— Mycelio e hyalino aurantio; hyphis fertilibus erectis, subinde helicoideo-incurvis variis; sporangiis sphaericis circinatis, majoribus 40-50 μ d., pariete granuloso-aspera, columellâ ex hemisphaerico elongata; minoribus 14-16 μ d. distinctius grosseque rugosis, columella subnulla; capitulis sporangioliferis solitaris, sporangiola pauca ferentibus; sporangiolis plerum trisporis; sporis utriusque formae e purpureo rufo-brunneis, longitudinaliter striato-sulcatis, sporangiorum 8-10 × 4, sporangiolorum 12 × 5. 3329

Hab. in larvis corruptis ad flores Vignae sinensis, Gainesville Florida, Amer. bor.

CIRCINELLA Van Tiegh. — Syll. VII p. 215, XVII p. 501, XXI p. 821.

1. **Circinella conica** Moreau, Bull. Soc. Mycol. Fr., 1913, p. 340, c. icon.— Hyphis fertilibus apice ramulis sporangiferis subcorymbosis circinnantibus quandoque nonnulis sterilibus praeditis; pedicellis saepe septatis, sporangiis sphaeroideis, maturis 50-70 μ diam., flavidis, tunica oxalato calcico incrustata matura rimosa basi tantum persistente; columella parum subjacente, quandoque spinescente, saepe fragaeformi, subconica; sporis sphaeroideis, 6-10 μ diam., levibus, hyalinis, v. parum cyanescentibus; zygosporis non visis. 3330

Hab. in fimo Elephantis, in Museo Hist. Nat. Parisiis, Gallia. — *C. umbellatae, minoris* et praecipue *asperae* affinis.

2. **Circinella Sydowii** Lendner, Bull. Soc. bot. Genève, sér. 2, V (1913) p. 29, c. ic. — Hyphis primariis tenellis, sursum flexis, ad angulum ramum verticaliter crescentem quasi hyphae primariae continuatio- 3331

nem emittentibus, ramis quoque apice flexis et ramulum apice flexum emittentibus, apicibus hypharum et ramorum acutis, saepe septatis, e latere pedunculum (raro duo) sporangiferum circinatum gerentibus, ramis extremis circinatis sporangiferis; sporangiis globosis, 100-100 μ diam., columella cylindrica aut cylindro-conica aut conica, quandoque medio parum constricta, panduriformis; sporis sphaeroideis, griseis, 6-7 μ diam.

Hab. in solutione saccharı in auri fodina, Johannesburg, Africa austr.

RHIZOPUS Ehrenb. — Syll. VII p. 212, XI p. 240, XIV p. 435, XVI p. 385, XVII p. 502, XXI p. 822.

1. **Rhizopus alpinus** Peyronel, I Germi atmosfer. dei Funghi con micelio (1913) p. 17. — Hyphis repentibus, hyalinis vel dilute fuligineis, ludibundo diametro, hinc inde in articulos secedentibus, caespitulos sordide albos, ob sporangia nigropunctatos efformantibus; sporangiophoris rectis vel curvulis, solitariis vel 2-5 fasciculatis, rhizoidibus omnino destitutis, 12-16 μ diam., sursum paullo incrassatis, ad basim saepe constrictis, pallide umbrinis, continuis vel prope basim septatis, 100-250 × 6 (prope pedem) — 16; sporangiis nigris, globosis, 90-150 μ diam., impellucidis, tunica dilabenti praeditis; columella globosa, 25-40 μ diam., vel piriformi, 40-50 × 37-45; sporis globosis vel plus minusve angulosis, singulis dilute fuscis, coacervatis atris, levibus, 2-5 μ diam. Zygosporis ignotis. 3332

Hab. e germinibus aëreis ex nemore Alni viridis, in liquido Raulini agaro consolidato cultis, Riclaretto (Pinerolo), Ital., bor.

2. **Rhizopus Delemar** (Boidin) Wehm. et Hanzawa, Mycol. Centrlbl. I (1912) p. 86, c. ic., IV, 1914 p. 193 — *Mucor Delemar* Boidin, nomen. — Caespitulis initio solutis, albis, dein densis, cinereis usque ad nigros; rhizoidibus brunneis valde ramosis; sporangiophoris erectis vel curvis, nigro-fuscis, usque ad 1-2 mm. altis, 22-26 μ crassis, more simplicibus, interdum autem valde ramosis, haud raro hinc inde incrassatis ramosisque; sporangiis globosis, 90-270 μ diam. (plerumque 140-180) initio albis dein nigris, saepe minute aculeolatis; columellis subglobosis, 60-100 × 40-80, initio albis dein fuscis, levibus; sporis globosis vel ellipsoideis, saepe obtuse angulatis, e griseo brunneolis, 8-13 × 6-9; chlamydosporis hyalinis vel subfuscis, e cylindraceo globosis, 22-60 × 17-30; zygosporis nondum visis. — Optime vegetat in tuberibus Solani; magnopere saccharificat amylum; fermentescit saccharosium, glucosium, fructosium, galactosium, 3333

inulinam, raffinosium, maltosium; gelatinam tarde liquefacit; saccharum acidificat. — Opt. temp. 25-30°.

Hab. in amylo saccharificatione subjecto, in Japonia.

3. **Rhizopus kasanensis** Hanzawa, Mycol. Centrlbl. I (1912) p. 408, tab. 2 fig. 1 et V (1914) p. 235 fig. 4. — Primo albus dein e griseo nigricante; rhizoidibus valde ramosis e hyalino fuscis; sporangiophoris plerumque simplicibus, rectis vel parum curvatis, singulis vel 2-3 ad quoque nodum, initio hyalinis dein brunneis vel atris, 150-500 vel 1000-2000 μ altis, 6-25 μ crassis; sporangiis globosis, primo niveis demum atris, 60-180 μ diam., vel 37-195 × 165; columella lata, subglobosa, fusca, 40-120 μ diam.; sporis irregulariter sphaericis, saepius obtuse angulatis, 4-7,2 μ diam. vel 3,6-7,8 × 4,2-9,6, striatulis, fuscidulis; chlamydosporis evolutis, zygosporis non visis. 3334

Hab. ex aere culto in Rossia; mycosim in oculis canis inducens.

4. **Rhizopus ramosus** Moreau, Bull. Soc. Bot. Fr. LX (1913) p. 220.— Mycelio hyalino repente, sporangiophoris erectis, raro simplicibus, plerumque furcatis vel umbellato-ramosis, ad basim ramorum inflatis (ramis ut videtur e sporangio rudimentali nascentibus); sporangiis sphaeroideis, 100 μ et ultra diam., membrana incrustata; sporis ovatis, striatulis, griseo-fuscidulis, 6 × 3-4; columella hyalina, sphaerica, basi collariata. 3335

Hab. in Gallia — Affinis *Rh. nigricanti* sed bene distinctus.

5. **Rhizopus Usamii** Hanzawa, Mycol. Centrlbl. I (1912) p. 408, V (1914) p. 237, fig. 6.—Ex hyalino griseo-brunneus vel nigro-brunneus; rhizoidibus, interdum deficientibus, e nodulis 19-24 μ crassis orientibus, parce ramosis, primo hyalinis dein brunneis, sporangiophoris rectis vel curvatis, ramosis vel non, interdum hic inde vesiculoso-inflatis, 225-500 μ altis (interdum usque ad 2530), 12-24 μ latis, e hyalino brunneis; sporangiis globosis, erectis, 60-180 μ diam. vel 84-180 × 72-150, initio hyalinis dein atro-brunneis; columella globosa 60-120 μ diam. vel ovoidea, 48-113 × 40-120, e hyalino fuscidula levi; sporis pallide griseis vel brunneolis, proteiformibus: globosis, ovatis, cylindraceis vel obtuse angulosis, 3,6-7,2 μ diam. vel 3,6-7,8 × 4,2-9,6; chlamydosporis praesentibus, zygosporis non visis. 3336

Hab. in « Tanekoji », in Japonia (Usami).

6. **Rhizopus nigricans** Ehrb. — Syll. VII p. 212 — var. **minor** Jensen, Fung. Fl. of Soil, Cornell Univ., Coll. of Agric., Bull. 315 (1912) p. 447, c. ic. — A typo differt sporangiophoris non ultra 2,5 mm. altis, nec ultra 28 μ crassis, sporis magis regularibus et angustioribus, 4,5-10 × 4,2-6,6, obscure fuligineis. 3337

Hab. e solo cultus, Ithaca N. Y., Amer. bor. — var. **verticillatum** Demelius, Verh. zool. bot. Ges. Wien, Bd. 66., 1916, p. 489, fig. 1.— A typo recedit, hyphis fertilibus ad apicem 4,6 subverticillato-umbellatis; hyphis rhizoideis parum evolutis, conidiophoris brunneis.

Hab. ad folia Cichorii, Vindobona, Austria.

7. **Rhizopus Trubini** Hanzawa, Mycol. Centrlbl. I (1912) p. 408 tab. 3338
2 fig. 4 et V (1914) p. 236, fig. 5. — Initio albidus dein e griseo-albo brunnescens; rhizoidibus, interdum deficientibus, parce ramosis, e hyalino fuscidulis; sporangiophoris plerumque 2-3 ad quoque nodum, rectis vel curvatis, simplicibus vel ramosis, interdum hinc inde vesiculoso-inflatis, 180-2000 µ altis, 4,8-26,4 µ latis; sporangiis globosis, maturis atris, 60-200 µ diam.; columella globulosa, ovoidea, subcylindracea vel piriformi, initio hyalina dein pallide brunnea, levi, 40-120 µ diam. vel 60-120 × 50-143; sporis irregulariter globosis, ovatis, subangulosis, magnitudine ludibundis, 3,6-7,2 µ diam. vel 3,6-7,2 × 4,8-8,4, griseis vel brunneolis, striatulis; chlamydosporis 16,8-28,8 × 9,6-21,6; zygosporis non visis.

Hab. ex aere culto, in Rossia.— In canibus inoculatus, mycosim laetalem inducit.

8. **Rhizopus equinus** Luc. et Cost. — Syll. XVII p. 502 — var. **annamensis** P. N. Bernard, Bull. Soc. Mycol. 1914, p. 232, t. XIV. — Pedunculis sporangiferis binis aggregatis in hypha recta v. curva rhizoidifera, mucor ex penduculis singulis arhizoideis; sporangiis sphaeroideis supra et infra parum depressis, 48-84 µ diam.; columellis 48-52 × 18-24; sporis levibus rotundatis 4 µ diam.; chlamydosporis numerosis. 3339

Hab. in expectoratione hominis bronchytis aegroti, Hué Annam, Asia. — *Rh. equini* Luc. et Cost. 1903 affinis.

ABSIDIA Van Tiegh. — Syll. VII p. 214, IX p. 337, XI p. 240, XIV p. 435, XVI p. 386, XVII p. 504.

1. **Absidia cylindrospora** Hagem, Videnskabsselsk. i Kristianïa, 7 febr. 1907, et Unters. Norw. Mucor. in Videnskabs-Selskabets Skrift. 1. Math.-Narturw. Kl. 1907, n. 7, p. 45 fig. 21. — Syn. *Abs. spinosa* Lendner, C. R. Seanc. Soc. bot. Genève, 18 febr. 1907, et Bull. Herbier Boissier 2.e ser. v. VII n. 3, 1907; Syll. XXI p. 824. 3340

Nomen Hagemi anterior et tunc servandum.

PHYCOMYCES Kunze — Syll. VII p 204, XIV p. 434.

1. **Phycomyces spinulosus** Morini, Mem. Accad. Bol., Sez. Sc. Nat. X 3341

1914 p. 97 tab. fig. 5-10. — A *Phyc. nitenti*, cui valde affinis, sporangiis, sporis et columellis mox distinguitur, zygosporis superficie processibus bifidis acutisque cum episporio nigricantibus exasperatis.

Hab. in fimo v a c c i n o, sociis Pilobolis, in agro Bononiensi Ital. bor., parce.

PERICYSTIS A. D. Betts, Ann. of Bot. XXVI. 1914, p. 795. — Hyphae repentes vel suberectae, contextae, ramosae, septatae, cellulis multis in chlamydosporas se mutantibus, tandem saepe se dissolventes. Chlamydosporae terminales, laterales et intercalares, subglobosae vel irregulariter ovoideae, membrana crassa levi. Sporangia subglobosa vel ovoidea, ramis hypharum 3-5 fulta, sporis numerosis repletae; tunica sporangiorum membranacea, simplex, levis, tandem fusca. Sporae hyalinae, sphaericae, membrana crassa levi.

1. **Pericystis alvei** Betts, loc. cit. p. 795, tab. 75-76; Journ. of Econom. Biol., VII, 1912, p. 155 fig. 23-25. — Characteres ut supra. Mycelio albo, hyphis 2-6 (saepissime 5) μ diam.; chlamydosporis 4.5-9.5 × 4.5-7; sporangiis 20-40 × 20-30; membrana tandem atroviridi; sporis 3.7-4.7 μ (saepissime 4.3 μ) diam. 3342

Hab. ad pollinem, in favis A p i s m e l l i f i c a e, in Britannia.

ZYGORRHYNCHUS Vuill. — Syll. XVII p. 500, XXI p. 825.

1. **Zygorrhynchus Dangeardi** Moreau, Bull. Soc. Bot. Fr. 59 (1912) p. LXVII (1913). — Mycelio albido plerumque vix $^1/_2$ cm. alto, in culturis senescendo griseo dein atro; sporangiis haud copiosis sporangiophoris ramosis suffultis, globulosis, luteolis, 25-65 μ diam. membrana in aqua disrumpente et collare basilare relinquente; columella levi, 12-32 μ alta, 12-36 μ lata; sporis ovoideis, 2-5 × 2-4.5, hyalinis, 1-2 guttatis; chlamydosporis raribus, ovatis, levibus, 30 × 15; zygosporis aëreis, ad superficiem substrati praecipue sese efformantibus, e fusione zygophororum initio similibus dein heteromorphis productis, utplurimum globosis, 18-48 μ diam., interdum vero retortaeformibus vel etiam cucurbitaeformibus, initio tuberculis minutis luteolis demum spiculis atris 3-5 μ longis saepeque recurvis, regulariter sparsis exornatis. — A caeteris speciebus differt praecipue quia e zygosporarum nucleis quatuor tantum bini inter se conjugantur. 3343

Hab. in Gallia.

2. **Zygorrhynchus Bernardi** Moreau, Bull. Soc. Bot. Fr. LX (1913) p. 3344

256. — Mycelio albo, elevato; sporangiophoris botryose ramificatis; sporangiis sphaericis, 18-53 μ diam., paucis, columella subsphaerica, parum latiore quam alta, 11-23 × 10-20; sporis ovoideis, 3 × 2, levibus; zygosporis aereis, sphaeroideis, initio luteoscentibus dein nigris, 32-50 μ diam., spinulis sparsis vel hinc inde caespitosis, 3-5 μ altis ornatis; chlamydosporis doliiformibus, 30 × 20.

Hab. in Gallia.

3. **Zygorrhynchus japonicus** Kominami, Mycol. Centralbl., V p. 3 (1914) 3345
cum tab. — Hyphis sporangiferis 9-15 μ latis; sporangiis globosis, 56 μ diam., membrana in aqua diffluenti, columella subglobosa vel obovata, 30-45 μ alta, 20-30 μ lata; sporis ellipsoideis, hyalinis, variae magnitudinis, 3-10 × 1,5-6; chlamydosporis levibus, ovoideo-elongatis 40 × 25; zygosporis globosis, episporio verrucoso brunneo, **68-80 μ diam.**

Hab. **in terra, ex culturis, Kamakoura, Japonia.**

PILOBOLUS Tode — Syll. VII p. 184. XVII p. 505. XXI p. 827.

1. **Pilobolus Schmidtii** Saccardo n., *Pilobolus* sp. Alfr. Schmidt, Jahresb. 3346
Schles. Gesellsch., 1912 p. 19. — Condiophoris solitariis e basi ovoidea, 560-720 × 340-400, dilute flavida, rhizoidibus praedita orimundis, cylindraceis 1,8 mm. altis, 120 μ cr., infra aspice 140-160; vesicula subsporangiali ovoidea subhyalina, 800-1000 × 640-800, infra anulata, contentu granuloso aurantio; columella hyalina, apice rotundata, fortiter contracta, 250-370 × 180-270; sporangis hemisphaericis, nigris, 430-510 μ cr., 240-400 μ altis; membrana nigro-cyanea, verrucosa; sporis flavis, in aqua non secedentibus, ellipsoideis, **tenuiter tunicatis, 6,5-8,5 × 5-6.**

Hab. cum fimo Muli, ex Amani, Africae orient., in laboratorio bot. Breslaviae cultus. — Affinis *P. Kleinii* sed mensura partium diversa.

HAPLOSPORANGIUM Thaxt., Bot. Gaz. LVIII (1914) p. 362. — (Etym. *haplos* simplex et sporangium). — Mycelium filamentosum, contracto-septatum, ramosum, tomentosum. Sporangiophora radiatim evoluta, subcuspidata, sporangia singula v. bina 1-2-spora apicibus ferentia. Affine *Mortierellae*, a qua imprimis differt fabrica mycelii.

1. **Haplosporangium bisporale** Thaxt., l. c. p. 363 t. XXIX. — Ex albo 3347
flavidum; sporangiophoris cuspidatis, brevibus, indivisis v. furcatis, continuis 48-55 × 5; sporangiis globosis, levibus, monosporis 8 μ diam., bisporis 11-12; sporis singulis sphaericis, binis hemi-

sphaericis, hyalinis, subinde minutissime rugulosis.

Hab. in stercore s u i n o, m u r i n o etc., E. Tennessee, Maine, New Hampshire, Amer. bor.

2. **Haplosporangium decipiens** Thaxt., l. c. p. 364 t. XXIX. – Affine praecedenti, sed sporangiophoris jugiter majoribus, 60-65 μ longis; sporangiis semper monosporis et nutantibus 8-10 μ diam.; tunica rugoso-aspera; sporis sphaericis et levibus. 3348

Hab. in stercore S e l e n o d o n t i s, ex ins. Hayti seu S. Domingo, Ind. occid., inde cultum.

DISSOPHORA Thaxt., Bot. Gaz. LVIII (1914) p. 361 — (Etym. *dissos* duplex, geminus, et *phoreo* fero). — Hyphae fertiles ex mycelio tenui repente abrupte mutatae, indefinite crescentes ubique sporangiophora brevia simplicia edentes. Sporangia solitarie acrogena globosa. Sporangia et sporae ut in *Mortierella*.

1. **Dissophora decumbens** Thaxt., l. c. p. 361, t. XXVIII. — Hyphis fertilibus primariis erectis, dein decumbentibus, firmis, apice indefinite crescentibus, raro septatis; sporangiis sphaericis, columella carentibus, 17-23 μ diam. in sporangiophoris sursum tenuatis, 100-150 × 8 acrogenis; sporis globoso-angulosis, 4 μ diam. 3349

Hab. in stercore m u r i n o, pr. Cambridge Mass., Amer. bor.

MORTIERELLA Coëm. — Syll. VII p. 221, IX p. 337, XI p. 240, XVI p. 387, XVII p. 506, XXI p. 828.

1. **Mortierella alpina** Peyronel, I Germi atmosfer. dei Funghi con micelio (1913), p. 17. — Effusa, tenuis, alba; hyphis sterilibus repentibus, ramosis, hyalinis, continuis, 0,5-4 μ diam., sporangiophoris erectis, simplicibus deorsum crassioribus, sursum leniter attenuatis, protoplasmate aequali farctis, 70-100 × 5-7, in sporangium unicum abeuntibus; sporangiis sphaericis, 8-16 μ diam., levissimis, membrana hyalina; sporis ovalibus vel ellipsoideis, levibus, hyalinis, 3-4 × 1,5-2, absque nuclei vel guttulae vestigio. 3350

Hab. e germinibus aëreis in agaro cultis, M. Cournour (Alpi Cozie), Ital. bor., alt. 2868 m.

2. **Mortierella Traversiana** Peyronel, I Germi atmosfer. dei Funghi con micelio (1913) p. 17. — Effusa, tenuis, sordide alba; hyphis sterilibus repentibus, ramosis, continuis, protoplasmate hinc inde granuloso farctis; sporangiophoris erectis, deorsum incrassatis, sursum attenuatis, 100-700 × 6-8, simplicibus vel ramosis, et tunc ramis in racemum dispositis, sursum attenuatis, in sporangium abe- 3351

untibus; sporangiis sphaericis, 15-40 μ diam., levibus, membrana hyalina praeditis; sporis globosis vel mutua compressione polygonis, 4-7 μ diam., raro ellipsoideis, usque ad 12 × 7, hyalinis, episporio echinulato praeditis. Chlamydosporis rhombicis vel ellipsoideis, protoplasmate minute granuloso farctis, hyalinis, levibus, membrana crassiuscula instructis, 14-15 × 9-12.

Hab. e germinibus aëreis in agaro cultis, M. Cournour (Alpi Cozie) Ital. bor., 2868 m. alt.

3. **Mortierella globulifera** O. Rostrup, Dansk. Botan. Arckiv. 2., 1916, n. 5, p. 2, fig. 1. — Hyphis sporangiferis caespitosis, continuis, simplicibus, basi incrassatis $^1/_2$ mm. altis, infra 24-28 μ, supra 4,5-5,5 μ crassis, basi vesiculis subglobosis, hyalinis instructis; sporangiis globosis, albis, glabris, 40-48 μ diam.; sporis globosis, episporio tenuiter echinulato, 6-7 μ diam. 3352

Hab. in fimo equino, S. Jaegersborg Dyrehave, Dania.

CUNNINGHAMELLA Matr. — Syll. XVII, p. 508, XXI p. 828.

1. **Cunninghamella Bertholletiae** Stadel, Dissert. Kiel (Lüdtke et Martens ed.) 1911. — Nomine nobis tantum nota. 3353

Hab. in Bertholletia putrescenti, ex Brasilia.

Fam. 2. **Entomophthoraceæ** Schr.

EMPUSA Cohn. — Syll. VII p. 281, IX p. 349, XXI p. 831.

1. **Empusa elegans** Maimone, Centralbl. Bakt. II Abt., 40. (1914) p. 107, 5 tab. — Conidiophoris simplicibus, clavatis, cytoplasmate vacuoloso plurinucleato praeditis; conidiis typice piriformibus, apice truncatis, plurinucleatis, vacuolum centrale amplum praebentibus, 24-36 × 15-24; chlamydosporis globosis, membrana incrassata glabra praeditis, plurinucleatis, 36-63 μ diam.; gemmis (mycelio) multiformibus, in hospite intus crescentibus; conidiophoris et conidiis extus non efflorescentibus. 3354

Hab. in larvis Porthesiae chrysorrhoeae, quas necat, Campobasso, Ital. austr.

ENTOMOPHTHORA Fres. — Syll. VII p. 282, IX p. 351, XIV p. 437, XVI p. 388, XVII p. 510, XXI p. 831.

1. **Entomophthora Pseudococci** A. T. Speare, Fungi Parasitic up. Insects Injurious to Sugar Cane, Rep. Exp. Stat. Hawaij. Sug. Plant. 3355

Ass., Bull. n. 12, 1912, p. 14, 26, tab. I-II. — Conidiis sphaeroideis subconoideo-papillatis, 20-25 μ cr.; conidiophoris plerumque simplicibus e mycelio emergentibus; conidiis secundariis presentibus, conformibus, e mycelio conidii primarii varie productis; sporis perdurantibus, zygosporis, sphaeroideis hyalinis, levibus, 20-27 μ cr.; hyphis rhizoideis presentibus, ex 2-3 hyphis simplicibus, apice ramosis, tortuose contextis efformatis.

Hab. in Pseudococco calceolariae parasiticum, Honolulu, Ins. Hawaj.

2. **Entomophthora Henrici** Molliard, C. R. Accad. Sc. Paris t. 167, 1918, p. 958. — Hyphis conidiophoris ramosissimis; conidiis ovoideis, hyalinis, pluriguttulatis, apice non apiculatis, 20-24 × 13-18; conidiis secundariis conformibus; azygosporis sphaeroideis hyalinis, 32-36 μ diam.; cystidiis et chlamidosporis in cultura praesentibus. 3356

Hab. in Culice pipienti emortuo, Gallia.

3. **Entomophthora Nebriae** Raunkiaer, Botanisk Tidsskrift, XVIII, 1892-93. — Hyphis conidiophoris ramosis, septulatis, hyalinis, sursum claviformi-incrassatis, 11-15 μ latis; conidiis ellipsoideis vel fusiformibus, saepe subcurvatis, 28-37 μ longis, 10-13 μ latis, hyalinis, levibus; sporis perdurantibus latere hypharum mycelii hyalino-brunneoli extra corpore insecti evolutis, globosis, 35-50 μ diam., hyalino-brunneolis, episporio subcrasso levi tectis. 3357

Hab. in Nebria brevicolli emortuo, in Dyrehaven propre Hauniam (Saellandia), (1888 legit Auct.).

4. **Entomophthora Jaapiana** Bubàk, Ann. Mycol. 1916, p. 341. — Sporis perdurantibus corpore pulvere laete flavo omnino implentibus et mumificantibus, inter articulos omnes linealiter exsurgentibus, globosis, 35-45 μ diam., hyalinis v. dilutissime flavidis, episporio 2-2,5 μ cr. glaberrimo; hyphis saepe ramosis, 10-14 μ cr. parte inferiore fortiter flexuosis, supra in parte sporigera clavatis, hyalinis, continus. 3358

Hab. in cadaveribus Euacanthi interrupti, Oberkopt, ad 750 m. alt., in silva Thuringiaca, Germania (O. Jaap).

Fam. 3. **Chytridiaceæ** De Bary et Wor.

PLEOTRACHELUS Zopf. — Syll. VII p. 315, XIV p. 440, XVI p. 389, XXI p. 835.

1. **Pleotrachelus Ectocarpii** Milla Jokl, Oesterr. Bot. Ztschr. LXVI, 3359

p. 267, tab. 4-5 (1916). — Mycelio nullo; sporangiis globosis, solitariis vel plurimis in quaque cellula, magnitudine maxime ludibundis, minimis 3,2 μ, maximis 40 μ diam., interdum irregularibus, e zoosporis amoeboideis directe orientibus, collum plerumque unicum, raro 3-4, 6-60 μ longum 2,5-10 μ crassum praebentibus, contentu granuloso farctis; zoosporis haud bene visis.

Hab. in cellulis Ectocarpi granulosi, prope Ergestem lecti.

2. **Pleotrachelus Zopfianus** Morini, Mem. Accad. Bologna, Sez. S. Nat. X, 1914, p. 77, tab. fig. 1-4.— Zoosporangiis globosis, pallide flavo-aurantiis, 41-47 μ diam.; zoosporas ovoideo-piriformes, uniciliatas, 3-4 μ longas includentibus, maturitate singulam v. binas appendices filiformes proferentibus; appendicibus membranam trophocystarum matricis perforantibus et zoosporis disseminantibus. 3360

Hab. in trophocystis bicellularibus Piloboli Piroltani, in agro Bononiensi, Ital. bor.

WOLKIA (Wolk) J. Ramsbottom, Trans. Brit. Myc. Soc. V, pt. 1., 1914, p. 143 (1914). — Ita vocandum **Protascus** V. d. Wolk, Myc. Centr. III (1913) p. 153, cum extet anterius *Protascus* Dang., Syll. XVII p. 516.

1. **Wolkia decolorans** (Wolk) J. Ramsb., l. cit. — *Protascus decoloratus* V. d. Wolk, loc. cit. cum tab. col. — Mycelio tenui, varie ramoso, copiose septato luteo-roseolo; ascis in ramis mycelii acrogenis, globosis, in juventute roseis, granuloso-farctis et grosse guttulatis; sporis in quoque asco numero variabilibus, 2-15, plerumque vero 15, ellipsoideis vel subglobosis, levibus, rufo-brunneis. 3361

Hab. in caryopsidibus Oryzae sativae, quas colore luteo tingit, « yellow grains », Buitenzorg, Java.—Mensurae desiderantur.

PROTASCUS Dang. — Syll. XVII p. 516.

1. **Protascus subuliformis** Dang. — Syll. XVII p. 516 — var. **Maupasii** Maire, Bull. Soc. Hist. Nat. Afrique du Nord, t. VII, 1915, p. 50.— A typo differt thallo longiore pluri-(usque ad 8-) septato, articulis totidem sporocysta gignentibus; nec non oosporis heterogamicis globosis, levibus, 15-30 μ diam. 3362

Hab. parasitice in corpore Rhabditis, Algeria, Africa bor.

OLPIDIUM A. Braun — Syll. VII p. 310, IX p. 362, XI p. 246, XIV p. 438, XVI p. 389, XVII p. 511, XXI p. 833.

1. **Olpidium Viciae** S. Kusano, Journ. Coll. of Agric. Tokyo, IV, 3 (1912) p. 188, c. tab. — Zoosporangiis in cellulis epidermicis solitariis vel gregariis (saepe usque ad 20) ita ut sporangia quiescentia, forma et magnitudine variabilibus, cellulae hospiti conformibus quando solitariis, quando gregariis mutua pressione polygonalibus, 20-120 μ diam.; collo brevissimo, in sporangiis minoribus unico, in majoribus copiosis (4-7) e quibus vero uno tantum fungente; zoosporis hyalinis, ellipsoideis, vel ovatis, 6-7 × 5, cilio posteriore unico praeditis; sporangiis quiescentibus solitariis vel aggregatis (saepe ultra 10) in cellulis epidermicis, 17-47 μ diam., exosporio lutescente tenui, endosporio hyalino crassiusculo, e copulatione zoosporarum ortis. 3363

Hab. in caulibus et foliis Viciae unijugae, Tokyo, Japonia.

OLPIDIOPSIS Cornu. — Syll. VII p. 299, IX p. 362, XI p. 247, XIV p. 439, XXI p. 834.

1. **Olpidiopsis luxurians** J. T. Barrett, Annals of Bot. XXVI (1912) p. 231, tab. 23-26. — Zoosporangiis solitariis vel numerosis, in cellula matricis plerumque intercalaribus viventibus, e ovalibus sphaeroideis, magnitudine variis, collis 1-3 extra cellulam matricis valde prominentibus ornatis; zoosporis minutioribus, elongatis, ciliis duobus apicalibus vel subapicalibus praeditis; oosporis sphaericis 25-50 μ diam., endosporio crasso, episporio tenui, spinis numerosis, conicis, basi dilatatis, apice acutissimis; antheridiis globosis, vel saepe ovoideo-ellipsoideis, 10-25 μ diam., membrana levi hyalina. 3364

Hab. in Aphanomyce laevi, Ithaca, N. Y., Amer. bor.

2. **Olpidiopsis vexans** J. T. Barrett, Annal. of Bot. XXVI (1912) p. 231, tab. 23-26. — *O. Saprolegniae* A. Fisch. in Rabh. Krypt. Fr. Deutschl. I, IV, p. 38, non Cornu. — Zoosporangiis solitariis vel numerosis, in cellula matricis terminalibus vel intercalaribus viventibus, ellipsoideis, ovalibus vel sphaericis, magnitudine variis, 50-176 μ diam., hyalinis, membrana tenui, levi; zoosporis numerosis, elongatis, ciliis duobus apicalibus vel subapicalibus praeditis; oosporis griseis, sphaericis vel ovatis, interdum ellipsoideis, circ. 116 × 84 (saepissime 50 μ diam.), endosporio crasso, levi, episporio tenui verrucoso; antheridiis hyalinis, sphaericis vel ovoideis, membrana tenui levi cinctis, 20 μ diam. 3365

Hab. in Saprolegnia feraci, Ithaca, N. Y., Amer. bor.

SOROLPIDIUM Nêmec, Bull. int. Acad. Sc. Bohem., 1911: Ber. deutsch. bot. Ges., Bd. XXIX, 1911, p. 48.

1. **Sorolpidium Betae** Nêmec, l. c. p. 48. 3366

Hab. in radicibus emortuis Betae vulgaris, Europa med.

WORONINELLA Rac. — Syll. XVI p. 392.

1. **Woroninella aecidioides** (Peck.) H. Sydow, Ann. Mycol. XII, 1914, p. 485. — Ita vocandae sunt *Uredo aecidioides* Peck, *Uredo Pecki* Thümen, *Synchytrium decipiens* Farl., *Synchytrium aecidioides* Farl. 3367
2. **Woroninella Dolichi** (Cke) H. Sydow, Ann. Mycol. XII, 1914, p. 485. — Ita vocandum est *Aecidium Dolichi* Cke., *Uromyces vignicola* P. Henn. 3368
3. **Woroninella Puerariae** (P. Henn.) H. Sydow, Ann. Mycol. XII, 1914, p. 486. — Ita vocandum est *Uromyces Psophocarpi* Raciborski. 3369
4. **Woroninella citrina** (Lagh.) H. Sydow, Ann. Mycol. XII, 1914, p. 486. — Ita vocandum est *Synchytrium aecidioides* var. *citrinum* Lagh. 3370
5. **Woroninella aequatoriensis** H. Sydow, Ann. Mycol. XII, 1914, p. 486. — Sporae 20-28 μ diam., 3371

Hab. in foliis Psoraleae Mutisii, Quito, Aequatoria, Amer. austr. (G. v. LAGERHEIM).

SYNCHYTRIUM De Bary. — Syll. VII p. 288, IX p. 357, XI p. 247, XIV p. 441, XVI p. 390, XVII p. 512, XXI p. 838.

1. **Synchytrium trichophilum** Correns et Tobler, ap. G. Tobler, Synchytrien, in Arch. Protistenk. XXVIII (1913) p. 174, tab. 12 fig. 35-37. — Syn.? *S. Jaapianum* P. Magn. 1914. — Cellulis perdurantibus singulis vel pluribus (2-8), 45-60 μ diam., membrana externa nigrescenti-flava, levi, 4 μ circ. crassa, protoplasmate granulato, brunneo, protoplasmatis cellulae hospitalis massa tectis; sporangiis 30-40, rotundatis, 12 μ circ. diam.; zoosporis incognitis. 3372.

Hab. in pilis foliorum et caulium Symphyti officinalis [Borraginaceae] quos saepe deformat, prope Lipsias Saxoniae in Germania (CORRENS). — Verisimiliter eodem est ac *Synch. Jaapianum* P. Magn. in Jaap, Ann. Mycol., XII, 1914, p. 2, quoque in Symph. off., ex Rödgen Germania.

2. **Synchytrium incrassans** Maire, Bull. Soc. H. N. Afrique du Nord, 1917, p. 1917, p. 135. — Cecidiis saepe in basi pilorum evolutis, compositis, e luteolo atro-brunneis, punctiformibus, frequenter ag- 3373

gregatis, 1-3 cellulas matricis continentibus; cellulae matrices cysti fere repletae, contentu e hyalino rufo-brunneo, granuloso, demum saepe subnullo, membrana valde incrassata, e hyalino dilutissime brunneola; cellula matrice stratu unico cellularum valde incrassatarum hyalinarum obvoluta; cystis in cellulis matricibus singulis, episporio levi, crassiusculo, 7 μ cr., e hyalino fulvo guttulis numerosissimis farcto praeditis.

Hab. in foliis vivis Thrinciae tuberosae [Compositae], in Mauretania, Afr. sept.

3. **Synchytrium globosum** Schröt. — Syll. VII p. 288 — v. **alpestre** Maire, 3374
Bull. Soc. Bot. Fr. LVII (1910) p. CLXVI. — Gallis plerumque compositis e pallido brunneolis, cellula matrice unica semper hyalina v. subhyalina praeditis; chronizoocysta (cysta) in cellulis matricalibus singula rarius bina, episporio levi, 1-2 μ cr. e hyalino dilute brunneolo, tenui induta, globosa v. subglobosa, 30-60 μ diam. contentu griseo-hyalino farcta.

Hab. in caulibus foliisque Phyteumatis, prob. pauciflori [Campanulaceae], in pascuis alpinis Passo del Ladro, Alpi marittime. — A typo differt gallis dilutius coloratis et cystae tunica tenuiore nempe 1-2 μ cr. nec 3-4 μ.

4. **Synchytrium Bromi** Maire, Bull. Soc. H. N. Afr. du Nord, 1917, 3375
p. 134. — Cystis in maculis foliorum atro-purpureis gregatim evolutis, subglobosis, ellipsoideis v. e mutua pressione plus minusve compressis, levibus, brunneis, pellucidis, 75-260 × 60-250, 1-nucleatis, membrana usque ad 12-15 μ cr. praeditis.

Hab. in foliis vivis Bromi madritensis juvenilis [Graminaceae], in Mauretania, Afr. sept.

5. **Synchytrium Marrubii** G. Tobler, Synchytrien, in Arch. Protistenk. 3376
XXVIII (1913) p. 221. — *Synchytrium ?* — Farlow in Bot. Gazette X (1885) p. 240. — Gallis ? minutis, 60-75 μ diam., non prominentibus; soris perdurantibus ? in cellulis matricalibus hypertrophicis.

Hab. in foliis Marrubii vulgaris [Labiatae], in America bor. — Species omnino dubia.

6. **Synchytrium Ulmariae** K. Falck et Lagerh., Ark. f. Bot. XII (1912) 3377
n. 5 p. 4 (comm. 24 apr. 1912, edita 3 dec. 1912); *S. Ulmariae* Tobler, Archiv. Protistenk., XXVIII, 1913, p. 191, tab. 13 fig. 50. — Verrucis minutissimis amphigenis sed plerumque hypophyllis nervicolis, 60-100 μ diam.; sporangiis solitariis, raro 2-3 in quoque

cellula, globosis v. globoso-ellipsoideis, 40-60 μ diam.; exosporio levi, flavo contentu hyalino.

Hab. in foliis Spiraeae Ulmariae [Rosaceae], Fjällnäs, Älfkarleö, Runmarö, Stora Rör, in Suecia.

7. **Synchytrium aurantiacum** G. Tobler, Synchytrien, in Arch. Protistenk., XXVIII (1913) p. 186, tab. 12 fig. 44. — Tuberculis compositis, aggregatis, pomiformibus, aurantiacis, vertice depresso, 300 μ circ. diam.; soris perdurantibus, globosis, 150 μ circ. diam., contentu oleoso flavo; sporangiis et zoosporis non visis. 3378

Hab. in foliis caulibusque, praecipue in nervis foliorum Salicis repentis [Salicaceae], prope Münster Westf. in Germania (G. Tobler).

8. **Synchytrium cellulare** Davis, Parasit. Fungi Wisconsin IV, Trans. Wisc. Ac. of Sc. etc. XIX, 1919, P. II, p. 681, cum icon. — Gallis foliicolis amphigenis, quandoque petiolicolis, 130-240 × 110-150, e cellula magna centrali et minoribus periphaericis (30-40 μ cr.) circumdata; cellula centrali quandoque horizontaliter divisa, infra sporangifera; sporangiis 30 v. ultra, flavis, e sphaeroideis ellipsoideis, 18-26 × 15-22; sporis persistentibus e globosis ellipsoideis, brunneis, 50-90 × 40-80. 3379

Hab. in foliis petiolisque Boehmeriae niveae [Urticaceae], prope Devils Lake, Wisconsin, Amer. bor.

RHIZOPHIDIUM Schenk — Syll. VII p. 298, IX p. 362, XI p. 248, XIV p. 443, XVI p. 390, XVII p. 512, XXI p. 842.

1. **Rhizophidium Eudorinae** Hood, Proc. Birm. N. H. Soc. XII (1910) p. 45 et Trans. Br. Mycol. Soc., V (1916) p. 236. — Mycelio filamentoso, tenui protoplasmatico, simplici, zoosporangiis supra cellulam hospitem evolutis, phialiformibus, longe rostratis, hyalinis, 20-35 μ longis, 10-17 μ latis; zoosporis copiosis, ovoideis, 2 μ circ. diam., 1-ciliatis, guttula oleosa minuta refringente praeditis; sporis duraturis sphaeroideis, asexualiter orientibus, externis, membrana crassa, hyalina, sparse minuteque granulosa, guttula oleosa ampla intus repletis, 10-16 μ diam. 3380

Hab. parasitice in coloniis semoventibus Eudorinae elegantis, Lutton Park, Warwichshire, Britannia.

2. **Rhizophidium monosporum** Maire, Bull. Soc. Linn. Normandie, ser. 6., II, p. LXVIII (1910). — Nomen nudum. 3381

Hab. in granulis pollinicis Pini, in horto botan. Caen, Gallia.

MITOCHYTRIDIUM Dang., Bull. Soc. Mycol. de Fr.,1911, p. 200.— Sporangia singula in cellulis matricis nidulantia, finiculoso-ramosa, non septata, hinc inde ostiolo cylindraceo praedita. Zoosporae rotundatae, uni-guttulatae uni-flagellatae. Hyphae rhizoideae hinc inde a superficie sporangiorum orientes. Sporae perdurantes (? oosporae) sphaeroideae, crasse tunicatae.

1. **Mitochytridium ramosum** Dang., l. c. p. 202 fig. 1. — Sporangiis 60 μ cr., subdichotomice divisis et 100 μ et ultra longis; zoosporis 4-5 μ diam. longe flagellatis; ? oosporis sphaeroideis crasse tunicatis, granuloso-farctis, 25-30 μ diam., solitariis vel 2-3 congregatis et filo rhizoideo conjunctis. 3382

   Hab. parasitice in Desmidiacea, Docidium Ehrenbergii, in paludosis prope Ségrie Sarthe, Gallia.

CHYTRIDIUM A. Br. — Syll. VII p. 304, IX p. 358, XI p. 250, XIV p. 446, XVII p. 513, XXI p. 844.

1. **Chytridium alarium** Al. L. Kibbe, Puget Sound Mar. Sta. Pub. 1., 1916, pp. 221-226, tab. 39-40. — Nomine nobis tantum nota. 3383

PHYSODERMA Walhr. — Syll. VII p. 317, IX p. 363, XI p. 250, XIV p. 447, XVII p. 513, XXI p. 846.

1. **Physoderma Narcissi** (Poir.) Sacc. et Trott., *Cladochytrium* (Physoderma) *Narcissi* Poirault, Bull. Assoc. Nat. de Nice, 1915 p. 7 (extr.). — Maculis violaceo-brunneis, limitatis, sporis totum folii parenchyma implentibus, brunneis, subglobosis v. breviter ellipsoideis, subinde uno latere compressis, 26-30 μ diam. 3384

   Hab. in foliis Narcissi Tazzetta [Amaryllidaceae], in Alp. Marit. — Valde affine *Clad. Muscari* Poirault, Syll. XXI p. 486.

2. **Physoderma Zeae-Maydis** Shaw in Syd. et Butl., Ann. Mycol. X, 1912, p. 245, fig. 2. — Maculas planas elongatas fuscas efformans; mycelio intra cellulas crescente; sporangiis perdurantibus pluribus in cellulis, fulvis, globosis v. ellipsoideis, 20-27 × 18-24. 3385

   Hab. in nervo medio foliorum Zeae Maydis [Graminaceae], Duars, Bengala, Indiae or. (E. J. Butler).

3. **Physoderma Maydis** Miyabe in A. Ideta, Handb. of Plant Dis. Japan 1909, Ed. 4., P. I, p. 114, fig. 119. — *Cladochytrium Maydis* Miyabe in Ideta, l. c. Ed. III, 1903, p. 75 (nomen nudum). — Tanaka, Mycologia 1922, p. 84. — Maculis numerosis parvis, orbicularibus, ellipsoideis v. linearibus, saepe confluentibus, brunneis v. fuligineis, ad marginem pallidioribus centro obscurioribus; spo- 3386

rangiis ovato-ellipsoideis v. globosis, obscure brunneis, 24-26 × 22-24.

Hab. in foliis culmisque nec non in vaginis bracteisque Zeae Maydis, et valde noxia, Japonia. — Verisimiliter est *Physoderma Zeae-Maydis* Shaw, ex Indiae or.

4. **Physoderma Myriophylli** (Rostr.) Vesterg., Rostr. et Lind, Dan. Fung. 3387
p. 52, f. 1 et t. I f. 5; *Cladochytrium Myriophylli* Rostr., Rev. Mycol. 1905 p. 164, Ferd. et Wingle, Mycol. Not. II p. 305 c. icon. — Tuberculis caulicolis, crassis, 1 cm. diam.; sporis creberrimis, tubercula implentibus, ellipsoideis, raro sphaeroideis, v. polyedricis, 25-40 × 20-25, tunica brunneo-flava, 4 μ cr.

Hab. in caulibus vivis Myriophylli verticillati [Halorrhagidaceae], in Daniae pluribus locis. — Sporae partim ut perdurantes habendae, partim ut sporangia considerandae, in quibus sporae minutae, hyalinae, 6 μ diam. evolvuntur.

5. **Physoderma Ornithogali** R. Maire, Schedae Myc. Bor.-Afr. in Bul. 3388
Soc. Hist. Nat. Afrique du N., t. 10, 1919, p. 137. — Maculis rufo-brunneis, ambitu flavo-virentibus, amphigenis, subtumidis, oblongis, 3-8 mm. longis; cystis (chronizoocystis) in cellulis parenchymatis, rarius in cellulis epidermidis evolutis, plerumque 2-4 in quadam cellula, subhemisphaericis, 24-30 × 20, episporio rufo-brunneo, 2 μ crasso, laxe foveolato praeditis, contentu achroo, guttulis oleosis numerosis praedito, farctis.

Hab. in foliis vivis Ornithogali narbonensis [Liliaceae], in Mauretania, Africa bor. (R. Maire). — *Ph. Urgineae* (Pat.) Maire proximum sed pluribus notis diversum.

6. **Physoderma deformans** Rostr., Rev. Mycol. 1886, p. 96 et in Ro- 3389
strup-Lind, Dan. Fungi, p. 51, t. I f. 1. — Flores hypertrophicos, subcarnosos et monstrosos efficiens, staminaque sterilia rubentia v. virentia et pistilla monstrosa incrassata reddens; sporis intercellularibus globosis v. crasse ovoideis 12-16 μ diam., membrana crassa pallide flava; mycelio copiose evoluto, parcissime septato.

Hab. in floribus, caulibus, foliisque vivis Anemones nemorosae [Ranunculaceae], in Dania. — Plantae affectae diutius vivae persistunt.

7. **Physoderma Calthae** Bucholtz, Mat. Mycol. ins. Osiliae (Rossia), 3390
p. 6. — Acervulis gregariis, rotundis v. ellipsoideis, 1-2 mm. diam., epidermide tectis, cinnamomeis; sporis (sporangiis?) ellipsoideis, 30-40 × 23, intus granulosis, guttulis oleosis praeditis; episporio ochraceo 2,5 μ circ. cr.

Hab. in caulibus foliis fructibusque Calthae palustris [Ranunculaceae], in paludosis, Nawska ins. Osiliae, Rossia.

8. **Physoderma bohemicum** Sacc., Ann. Mycol. XII, 1914. p. 295. — 3391
Gregarium, punctiforme, brunneolum; sporangiis perdurantibus intracellularibus, ellipsoideis 35-40 × 23-33, dilute fulvis, episporio levi, subtili, 1-1,5 μ cr. praeditis, junioribus hyalinis pluriguttatis.

Hab. in foliis petiolisque vivis Calthae palustris, Nechanice, Bohemia (E. Baudys). — Affine *Phys. vagante* et *Phys. Magnusiano*, dignoscitur sporangiis perdurantibus 1-paucis in quaque cellula matricis, paullo majoribus, et dilute fulvis. Sed verisimiliter non satis diversum a praecedenti.

UROPHLYCTIS Schröt. — Syll. VII p. 303, XVII p. 515, XXI p. 849.

1. **Urophlyctis Hymenoxidis** Speg., Mycet. Argent. VI, Anal. Mus. Nac. 3392
Buenos Aires, XXIII p. 4 (1912). — Soris pusillis, parenchymate foliorum pallescentium innatis, sparsis, rufescentibus ex oogoniis paucis, hyalinis, globosis, 60-80 μ diam. efformatis; oosporis solitariis subglobosis, saepius inferne umbonatis, subpiriformibus, 50 μ circ. diam., tunica ferruginea levi tenui vestitis, endoplasmate nubiloso hyalino repletis.

Hab. in foliis vivis Hymenoxidis anthemoidis [Compositae], in pratis circa La Plata, Argentina.

2. **Urophlyctis Lathyri** Björn Palm, in Svensk. Bot. Tidskr. Bd. 5., 3393
1911. p. 356, cum icon. — Pustulae in caulibus et in pagina superiore foliorum conspicuae, subglobosae. Sporangiis perdurantibus forma generis, brunneolis, plerumque 40-45 μ, in cellulis nidulantibus et eas maximas efficientibus. Sporangiis ephemeris nullis.

Hab. in foliis caulibusque deformatis Lathyri montani [Leguminosae], Ulriksdal prope Stockholm, et Lathyri pratensis, Stora Rör, Öland, Scandinavia.

3. **Urophlyctis ?linaricola** Speg., Mycet. Argent. VI, Anal. Mus. Nac. 3394
Buenos Aires XXIII p. 3, c. ic. (1912). — Tumores subglobosos, 5-10 mm. diam. botryose aggregatos, ex albo rubescentes vel viridulos ad collum radicis inducens; sporis majusculis, lateritiis, levibus, globosis, 75-150 μ diam., in capsula e cellulis parenchymaticis fusiformiter transformatis, 50-60 × 12-15, dense minuteque corrugatis compositis singulatim nidulantibus.

Hab. ad basin caulium Linariae canadensis [Scrophulariaceae], in dunis Ibicuy, Entre Rios, Argentina.

Fam. 4. Saprolegniaceae Pringsh. *)

PYTHIOPSIS De Bary — Syll. IX p. 346.

1. **Pythiopsis Humphreyana** Coker, Mycologia, 1914. p. 292. t. 148. — 3395
Hyphis sterilibus angustis, parce ramosis circ. 11-14 μ cr. ad insertionem sporangiorum v. oogoniorum validioribus, maturis mox subcolabescentibus; sporangiis variabilibus, sphaeroideis, ovoideis, piriformibus v. elongatis apice papillato dehiscentibus et e basi proliferantibus et tunc subcymosis; sporis piriformibus biciliolatis, 8-9 μ cr.; oogoniis conformibus et tunc praecipue juventute e sporangiis aegre distinguendis, apicalibus v. e latere subcymosis, magnitudine valde variabilibus 33-89 μ v. plerumque circ. 43 μ, tunica levi subaequali 1,4 μ cr. praeditis; oosporis plerumque singulis raro binis rarissime quaternis, 24-40 μ diam., tunica 2 μ circ. cr.; antheridiis breviter clavatis, pedicellis basi oogoniis valde approximatis v. subdistantibus, raro diclinis, singulis, binis v. quandoque plurimis juxta oogonium orientibus et apicibus oogonio adnatis.

Hab. Chapel Hile, Amer. bor. — *Pyth. cymosae* proxima.

SAPROLEGNIA Nees — Syll. VII p. 268. IX p. 345. XI p. 244. XIV p. 453, XVII p. 518, XXI p. 851.

1. **Saprolegnia variabilis** Minden. Krypt. Fl. Brandenb. V p. 524 (1912). — 3396
Fasciculis densis, hyphis pro ratione tenuibus, parce vel vix ramosis, mollibus constitutis; sporangiis primariis fusiformi-clavatis vel sphaeroideis, copiosissimis, 80 × 60 vel 70 × 57 circ., secundariis valde variabilibus, saepe in serie dispositis; oogoniis sphaeroideis, rarius plus minusve elongatis, 50-70 μ diam. vel 90 × 70 vel etiam 60 × 40, membrana crassa praeditis, indistincte punctulatis; oosporis 1-15, plerumque 4-8, sphaeroideis, 23-26 μ diam.; **antheridiis non visis.**

Hab. ad ova Formicarum terra uda diu servata, Hamburg in Germania. — Hyphae interdum in segmentis plus minusve co-

*) De nonnullis mycetibus aquaticis, cnfr. M. v. Tiesenhausen, Beitr. z. Kenntnis d. Wasserpilze der Schweiz. Inaug. Diss. Univ. Bern, 1911 et Archiv. f. Hydrobiologie u. Planktonkunde, Plön, Bd. VII, H. 2, 1912, pp. 261-308, 24 icon.

piosis divisis, ex quibus partim sporangia, partim oogonia, partim gemmae oriuntur. — Affinis *S. torulosae* et *S. moniliferæ*, forsitan identica cum *S. rhaetica* Maurizio, quae imperfecte descripta.

2. **Saprolegnia mixta** De By. — Syll. VII p. 270 — var. **Asplundii** E. Gäumann, Botaniska Notiser, 1918, p. 155. — A typo differt oosporis minoribus, modo 15-21, fere 16-19 μ latis. 3397

Hab. prope Airavare, Suecia bor. (E. Asplund).

3. **Saprolegnia lapponica** E. Gäumann, Botaniska Notiser, 1918, p. 156.— Caespitulis mollibus, 1-2 cm. a muscis distantibus; hyphis gracilibus, erectis, parce ramosis, 8-14 μ crassis; zoosporangiis diam. fere paullo maiore partibus terminalibus hypharum; antheridiis absentibus; oogoniis lateralibus, breviter pedunculatis vel sessilibus, pedunculo saepe tubiforme in oogonium prolifero; diam. fere 45-75 μ; foraminibus distinctis, impar frequentibus (v. c. 6-18 in oogoniis ejusdem hyphae); oosporis globosis vel late ellipsoideis, fulvis, 19-31, fere 21-24 μ diam., 1-18 in eodem oogonio nascentibus. 3398

Hab. ad terram muscosam sub Nuolja monte, Lapponia, Europa bor. — *Saprol. Thurreti* De B. proxima nec non *S. esocinae* et *bodanicae*.

4. **Saprolegnia monoica** De By. — Syll. VII p. 268 — var. **glomerata** Tiesenhausen, Beitr. Wasserpilze Schw., 1912, p. 277 fig. 6-8. — Caespitulis tenuibus, laxis, 1 cm. lat.; ramis lateralibus incrassatis, iterum divisis, varie curvatis et glomerulum parvum formantibus; sporangiis generis, interdum ex conidiis formatis, parvis piriformibus v. globosis; oogoniis 37-80 μ diam. pedicellis aeque ac ramulis sterilibus inaequaliter curvatis, saepe nodosis pluries ramosis; oosporis 22-24 μ diam., 1-23, typice 3-6 in quoque oogonio, antheridiis androgynis v. etiam diclinis. 3399

Hab. in laculo, Riffelberg pr. Zermatt, Helvetiae.— var. **vexans** A. J. Pieters, Bot. Gaz., LX, p. 489 (1915).— A typo differt quia oogonia in muscis aliisque substratis culta non efformat; oogonia in decoctione pisi leucina et levulosio additis tantum evoluta. — *Hab.* inter algas e Sukey Lake, Michigan, Amer. bor. — var. **turfosa** Minden in Krypt. Fl. Brandenb. V p. 516 (1912). — Oogoniis membrana valde incrassata, luteola praeditis, facillime perspicuis, plerumque in ramis brevibus, racemosis, dimidium oogonii diametrum saepe vix attingentibus, rarissime in hyphis ipsis insidentibus, 40-80 μ diam., plerumque 70 μ circ.; antheridiis ad quoque oogonium 1-2, e clavato-incurvis usque cylindraceo-elongatis, ramis brevissimis e stipite oogonii, rarissime ex hyphis ipsis

nascentibus insertis; oosporis plerumque 15-30, raro minus, sphaeroideis, levibus, 20-25 μ diam.

Hab. ad fructus M a l i et ad caules V i s c i, putrescentes, in Brandenburgia, socia *Aphanes*. — Sec. Cl. E. Gäumann (in Botaniska Notiser 1918, p. 153), varietas haec ut spec. habenda et tunc *Saprol. turfosa* (v. Mind.) Gaum. vocanda, cuius synonima haec sistunt: *Sapr. paradoxa* Peters. 1909, nec *Sap. paradoxa* Maurizius 1899.

5. **Saprolegnia stagnalis** Tiesenhausen, Beitr. Wasserpilze Schw. 1912, 3400
p. 276. — Caespitulis laxis, 2 cm. lat., sporangiis plerumque mediocribus e gr. 260 × 29, 500 × 20, 720 × 45, sed etiam 80 × 20; sporangiis secundariis adnexis; oogoniis in hypha primaria et ejus ramulis, rarius et secundi ordinis acrogenis, interdum quoque intra vacuum sporangium v. binato-seriatis; pedicello oogonii brevi et incurvo; oogoniis 25-80 μ diam., margine punctatis; oosporis typice concentricis 12-22,5 μ lat. rarius 32,5 × 15, in quoque oogonio 1-12, saepius 1-2; antheridiis semper diclinis.

Hab. in stagno, alt. 1920 metr., pr. St. Moritz, Engadina sup.— Ab affini *Sapr. dioica* pluribus notis dignoscenda.

6. **Saprolegnia Kaufmanniana** A. J. Pieters, Bot. Gaz., LX p. 488 (1915) 3401
tab. 21 fig. 5-7. — Habitu vegetativo *S. feraci* simili, hyphis firmis, rigidis; sporangiis liberis illis *S. feracis* omnimo similibus; gemmis globosis, ovoideis vel irregularibus, plerumque singulis, raro catenulatis; oogoniis majusculis ramulis plus minusve elongatis insidentibus, vel etiam intercalaribus, sparsis, ovatis vel clavatis, rarissime globosis, 100-250 × 70-80, membrana tenui levi haud foveolata; oosporis 3-4 in oogoniis minoribus, in ceteris copiosioribus, usque ad 20-30, 30 μ circ. diam. protoplasmate granuloso eguttulato farctis; antheridiis plerumque praesentibus, diclinis, e clavato incurvis vel irregularibus, saepe binis vel pluribus pro quoque oogonio.

Hab. inter a l g a s, laboratorio Universitatis cultas, Michigan, Amer. bor.

ACHLYA Nees — Syll. VII p. 274, IX p. 346, XI p. 245 et 658, XVII p. 518, XXI p. 852.

1. **Achlya asterophora** Minden, Krypt. Fl. Brandenb. V p. 549 (1912) 3402
fig. 2 c (p. 520). — Fasciculis spissis, ex hyphis usque ad 100 μ crassis; sporangiis ramorum sporangiferorum minus crassis; oogoniis terminalibus in ramis brevibus botryose dispositis, sphaeroi-

deis, spinis majusculis, cavis, conico-acutatis, interdum furcatis, 11-15 μ longis, plerumque dense distributis ornatis, 45-50 μ diam. (sine aculeis); antheridiis saepius per paria dispositis, rarius singulis, curvatis, clavatis, extremitate anteriore pariete oogonii adpressa; oospora typice unica (rarissime binis) sphaerica, 30-35 μ diam., matura guttulis oleosis variae magnitudinis excentrice coadunatis.

Hab. ad ramos aqua immersos, prope Hamburg, Germania. — Cum *Achlya racemosa* var. *spinosa* Cornu, cujus descriptio imperfecta, comparanda.

2. **Achlya ocellata** Tisenhausen, Beitr. Wasserpilze Schw., 1912 p. 287 3403
fig. 14. — Caespitulis, laxis, 3 mm. lat.; hypha primaria basi 175 μ cr., apice acuta; hyphis sterilibus saepe furcatis v. patenti-ramosis; sporangiis generis; oogoniis in hyphis plus v. minus incrassatis racemose digestis interdum intercalaribus; pedicello rarius usque 62 μ longo, plerum oogonium vix aequante, interdum nullo; oogoniis globosis, subinde piriformibus, 40-118 μ long., membrana levi, punctata; oosporis 17-25 μ diam., guttula refringenti ocellatis, 5-20 in quoque oogonio; antheridiis ad ramulos 5-8 μ crassos, androgynis v. diclinis.

Hab. in lacubus pr. Campfér, in Engadina superiori.

3. **Achlya radiosa** Maurizio, Beitr. z. Biol. d. Saprolegnieen in Ztschr. 3404
f. Fischerei etc., Mitt. d. deutsch. Fischerei-Ver., VII Jahrg., p. 2., Berlin 1899, p. 1-66; Tiesenhausen, l. c. p. 283, fig. 10-13. — Syn. ? *Achl. decorata* Peters., ? *A. racemosa* var. *spinosa* Cornu. — Hyphis mycelicis crassis, basi quandoque usque 140 μ cr. apicem versus usque 60 μ; sporangiis plerumque pleurogenis subcylindraceis 240-» 23; oogoniis sparsis v. dense racemosis plus minus longe pedicellatis, pedicellis 15-95 » 10-12,5 v. 50-80 » 7-10, globosis 55-63 v. usque 75 μ diam., emergentiis mamillato-acuminatis 12-20 μ altis; parietibus oogonii plus minus intense flavis; antheridiis e pedicello oogonii 1-2, v. pluribus efformatis, 10-13 μ cr., in pedicello proprio circ. 5 μ cr. vix articulatis.

Hab. ad frustula organica dejecta, Helvetia (Berna, Engadina) alioque.

4. **Achlya De Baryana** Humphrey. — Syll. XIX p. 6, XXI p. 854 — 3405
var. **intermedia** Minden, Krypt. Fl. Brandenb. V p. 545 (1912). — A typo differt ramulis lateralibus saepe ex pedicello oogoniali nascentibus, valde elongatis et ramosis; membrana oogoniorum indistincte punctulata vel etiam omnino levi.

Hab. in stagnis prope Lüneburg, Germania et diu ad ova Formicarum culta.

5. **Achlya paradoxa** W. C. Coker, Mycologia, 1914, p. 283, t. 146 f. 1-6. — Planta delicata; hyphis rectis, angustis, ramosulis, latioribus 37 μ cr., nonnullis etiam angustioribus et circ. 10-15 μ cr.; sporangiis semper copiosis, anguste clavulatis v. cylindraceis, apicem versus rotundatis et 55 μ diam. ibique distincte breviterque papillatis; sporangiis secundariis subfasciculatis nonnulis contentu destitutis; sporis laxe polystichis, omnibus ciliatis; oogoniis apice ramulorum lateralium insertis quandoque ad basim hypharum primariorum quandoque intercalaribus; tunica levi aequali; oosporis plerumque binis, saepe quaternis raro singulis v. octonis, 22-37 μ diam. (plerumque 30); antheridiis semper praesentibus et pluribus juxta oogonium, breviter clavatis, ad apicem ramulorum tenuiorum saepe circinnantibus circa stipitem oogonii ortis. 3406

Hab. Chapel Hill, Amer. bor.

6. **Achlya glomerata** W. C. Coker, Mycologia, 1912, p. 325, t. 79. — Hyphis ramosis subobtusis brevibus 40-45 μ cr. sursum sensim tenuatis et circ. 12 μ cr.; zoosporangiis cylindraceis et subinde irregularibus saepe papilla oblique dehiscentibus; oogoniis copiosis sphaeroideis verrucis irregularibus obtusis omnino tectis; oogoniis singulis v. racemosis; oosporis singulis v. rarius binis in quoque oogonio, 15-23 μ diam.; antheridiis (plerumque deficientibus), clavato-cylindraceis in apice ramulorum ex eodem glomerulo et singulis v. pluribus quoque oogonio adnexis. 3407

Hab. in aquis, Lone Pine Spring et Lone Pine Hill, prope Chapel Hill, North Carolina, Amer. bor.

7. **Achlya Klebsiana** A. J. Pieters, Bot. Gaz., LX, p. 486 (1915) tab. 21 fig. 1-4. — Hyphis rigidis, medio incrassatis, aliis latis, ramosis, 10-15 mm. et ultra longis intermixtis; sporangiis cylindraceis sporangia secundaria saepe efformantibus; oogoniis in ramulis brevibus lateralibus diametrum oogonii aequantibus insidentibus, raro in apice hypharum elongatarum, nunquam intercalaribus, globosis vel late ovoideis, levibus, oosporis 4-10, excentricis, 25 μ diam.; antheridiis origine diclinis oogoniis pro parte adpressis nunquam clavatis nec oogonia involventibus; gemmis catenulatis, ex articulis hypharum vesiculosis interdum breviter ramosis vel papillatis efformatis. 3408

Hab. inter algas in Michigan, Amer. bor.

BLEPHAROSPORA Petri, Rend. Accad. Linc. 1917, p. 297. — Mycelium diu unicellulare dein (cultura) pluricellulare intercellulare et intracellulare, parasiticum. Corpuscula (zoosporangia) sphaeroidea dein piriformia, ovalia v. citriformia, papillata, contentu granuloso, mox pluries partito et sporas (zoosporas) gignente. Sporae sphaeroideae hinc conico-productae, primitus immotae, dein sub luce et tepore mobiles et cilia longa bina gerentes.

1. **Blepharospora cambivora** Petri l. c. et in Ann. R. Ist. sup. forest. naz. vol. III, 1918 Extr. p. 3 et seqq., cum fig. et tab. IV.— Characteres generis, zoosporangia primum sphaeroidea dein ovoidea, piriformia v. citriformia, juniora 18-25 × 12-25, matura 60-75 × 40-54; zoosporae numero 8-10 usque ad 22 in quoque zoosporangio, modo immobiles subsphaeroideae papillatae, modo mobiles et ciliis binis praeditae, 12-15 μ diam., cilia praelonga filiformia sensim tenuata sinuosa, zoosporâ duplo triplove longiora. 3409

Hab. in stratu medio (*cambio*) trunci Castaneae vescae cui, teste auctore, affert morbum *dell'inchiostro*, in Italia. Zoosporae ubi fixantur cilia amittunt et germinant.

PYTHIUM Pringsh. — Syll. VII p. 270, IX p. 347, XI p. 244, XIV p. 455, XVI p. 895, XVII p. 518, XXI p. 854.

1. **Pythium conidiophorum** M. Jokl, Oesterr. bot. Ztschr. 67., 1918, p. 33, tab. I (absque diagn.). — Mycelio hinc inde ramoso, continuo, 2-6,3 μ cr., in cellulis plus minus copiose evoluto, et hinc inde e parietibus cellularum exeunte et hyphis lateralibus usque 100 μ long. emittente; sporangia nulla, sed conidia sphaeroidea 8-11, v. usque 20 μ diam., extus efformante, maturitate secedentia et hyphas mycelicas 1-2-3 emittentia; oogonia vix evoluta, verisimiliter omnino intercellularia, sphaeroidea 6,3-15,9 μ diam. (sed matura?); antheridia non visa. 3410

Hab. in cellulis Spyrogyrae dubiae, communis, variantis, in Lacu Scutari, Albania. — *Pyth. dictyospora* et *gracile* verisimiliter affine.

APHANOMYCES De Bary — Syll. VII p. 276, XVI p. 393, XXI p. 854.

1. **Aphanomyces helicoides** Minden, Kryptog. Fl. Brandenb. V p. 559 (1912). — Fasciculis albis, 1 cm. usque latis, ex hyphis 5-8 μ crassis constitutis; sporangiis apicalibus, filiformibus zoosporis monoseriatis continentibus, sporangiis secundariis paucis cymose dispo- 3411

sitis; oogoniis terminalibus, raro intercalaribus, ramis brevibus fultis, plus minusve sphaericis, pariete levi, crassa, 23-38 μ diam.; antheridiis majusculis, saepe longe cylindraceis, plerumque plurimis ad quoque oogonium eumque ramis lateralibus demum brunneis et deciduis spiraliter involventibus; oospora singula, sphaerica, 23-27 μ diam. guttulis oleosis, non semper bene distinctis, lateraliter positis.

Hab. simul cum aliis Saprolegniaceis, et diu ad ovos Formicarum culta, Hamburg, Germania. — Ab *A. laevi* De By. cui certe affinis, differt ramulis lateralibus antheridiorum oogonia vel etiam hyphas longe spiraliter involventibus.

APODACHLYA Pringsh. — Syll. XI p. 245.

1. **Apodachlya punctata** Minden, Krypt. Fl. Brandenb. V p. 586 (1912), fig. 15 (p. 580). — Mycelio longe filiformi, fasciculis fluctuantibus albis efformante, ex hyphis ramosis, longe segmentatis constituto; sporangiis terminalibus atque e gemmatione sympodiale lateraliter nascentibus, clavatis, ovoideis, piriformibus vel subglobosis, collo plerumque lateraliter inclinato; sporis hibernantibus apice hypharum elongatarum vel in ramis lateralibus segmentorum brevium insidentibus, sphaeroideis, membrana crassa bistratosa, strato interno regulariter minute punctato. 3412

Hab. ad ramos et caules putrescentes, Breslau et Hamburg in Germania.

2. **Apodachlya pirifera** Zopf. — Syll. XI p. 245 — var. **macrosporangia** Tiesenhausen, l. c. p. 298, fig. 19. — A typo recedit hyphis 5-15 μ (nec 4-10 μ), articulis 70-430 μ long., sporangiis 37-50 μ long. (nec 12-24 × 12-20); conidiis 25-33 μ diam. (nec 16 μ). 3413

Hab. ad acus Piceae excelsae in aqua dejectos, Hinterburgsee Stockhornkette, « Berner Oberland », 1525 m. alt., Helvetia.

3. **Apodachlya brachynema** (Hild.) Pringhs. — Syll. VII p. 265 (*Leptomitus*) — var. **major** Tiesen., l. c. p. 298 fig. 20. — A typo differt hyphis 6-13 μ cr. (nec 4-6 μ), articulis 15-537 μ long.; sporangiis majoribus 40-52 μ (nec 12-22 μ). 3414

Hab. ad terram humosam udam prope Zollikofen, Bern, Helvetia.

RHIPIDIUM Cornu. — Syll. VII p. 268, XIV p. 454.

1. **Rhipidium Thaxteri** Minden, Krypt. Fl. Brandenb. V p. 600 (1912). — Cellula basali usque ad 800 μ diam. et ultra, interdum monstrose 3415

discoidea, lobis usque ad 200 μ latis, filis rhizoidalibus copiosis substrato penetrantibus, hyphis e cellula basali ortis 1,5 tantum quam ea longis, 7-11 μ crassis, in aqua fluctuantibus, non segmentatis sed basi constrictis; sporangiis elongato-ellipsoideis, 50-55 × 20-35, saepe e gemmatione sympodiali ortis; oogoniis majusculis, irregulariter sphaericis vel piriformibus, apice tenuatis et late rotundatis, saepe pedicellatis, 57-62 × 45-57 (sine pedicello); antheridiis majusculis, 50-70 × 7-11, irregulariter clavatis, tota longitudine oogonio adnatis, in ramis tenuibus lateralibus, irregulariter ramosis e cellula basali inter oogonia orientibus sitis; oospora unica, majuscula, sphaeroidea, crasse tunicata, superficie areolata, 40-50 μ diam.

Hab. ad fructus et ramos A l n i, in ins. Waltershof flum. Elbae in Germania. — Caracteres fructificationis quasi medii inter *Rhipidium* et *Sapromyces*.

BLASTOCLADIA Reinsch. — Syll. XI p. 245, XIV p. 456.

1. **Blastocladia strangulata** J. E. Barrett, Bot. Gaz. LIV (1912) p. 353, 3416
tab. 18-20. — Axi primario ex ovato cylindraceo, basi filamentis rhizoideis copiosis, ramosis instructo, sursum copiose dichotomo vel subdichotomo-ramoso, ad basim ramorum pseudoseptato; zoosporangiis ovatis vel sphaeroideis 50-63 × 40-52, papillas dehiscentes paucas ferentibus; zoosporis ovoideis, 12 × 8, cilio plerumque simplici ornatis; sporangiis hibernantibus rotundatis, basim versus gradatim angustatis et truncatis, 45 × 35, zoosporas foventibus.

Hab. ad A p h i d e s in aqua, Ithaca N. Y., America boreali.

2. **Blastocladia rostrata** Minden, Kryptog. Fl. Brandenb. V p. 604 3417
(1912). — Axi primario ex hyphis 1-1,5 mm. longis, cylindricis, non vesciculosis, superne dichotomo-vel irregulariter ramosis, ramis iterum copiose divisis, apice non capitato-inflatis constituto; hyphis sterilibus nullis; sporangiis plerumque subspiraliter dispositis, e cylindraceo fusoideis, 70-100 × 20-30; sporis hibernantibus ellipsoideis, basi lata, apice rostrato, 40-53 × 25-30, membrana crassa sed tenuissime punctulata, bistratosa, maturitate strato externo deciduo et spora strato interno extus verruculoso tantum cincta.

Hab. ad fructus putrescentes aqua immersis, in ins. Waltershof flum. Elbae prope Hamburg, Germania.

3. **Blastocladia prolifera** Minden, Kryptog. Fl. Brandenb. V p. 606 3418
(1912). — Axi primario 170 × 80, plerumque late cylindraceo, apice in filamentis plus minusve copiosis varie distributis scisso, qui

sporangia copiosa ferunt; sporangiis cylindraceis, saepe curvatis, lata basi adnexis, apice attenuatis ibique obtuse papillatis, 80-150 × 15-30, post evacuationem zoosporarum pluries proliferantibus; sporis hibernantibus non visis.

Hab. ad fragmenta plantarum emortuarum, Dover Elbe prope Hamburg, Germania.

RHEOSPORANGIUM Edson, Journ. Agricult. Research, v. IV, n. 4., p. 291, (1915). — Mycelium aereum v. aquaticum bene evolutum, non septatum, ramosum. Multiplicatio aquatica, per zoosporas et per oosporas. Prezoosporangia terminalia e mycelio plus minus inflato et contorto efformata. Sporangia tenuiter tunicata, e apice lacerato presporangia erumpentia et zoosporas efformantia.

1. **Rheosporangium aphanidermatus** Edson, l. c. p. 291, tab. XLIV-XLVIII (1915). — Mycelio vegetativo albo, in aqua hyalino, primum continuo ad fructificationem septatum, ramosum, minute granuloso, saepe cursus protoplasmatis exibenti; hyphis junioribus 2,8-7,3 μ cr. plerumque 4-6 μ sed ad fructificationem crassioribus. Presporangiis e simplicibus et irregulariter clavatis usque ramosis 50-1000 μ long., 4-20 μ latis; sporangiis membrana flexibili subinconspicua, ex apice erumpentia, subsphaeroidea, magnitudine variabilia. Zoosporis e sporangiis ruptis exeuntibus, plano-convexis, vacuolo unico centrali praeditis, 12 × 7 crassis, infra in parte concava cilia 2 inaequalia praeditis. Oogoniis terminalibus, sphaeroideis 22-27 μ diam.; antheridiis terminalibus v. intercalaribus, suborbicularibus, demum cylindraceis v. late clavatis, 10-14 × 9-11. Oosporis singulis levibus v. inaequalibus circ. 17-19 μ cr. 3419

Hab. ad terram, in radicibus plantulae Betae vulgaris et Raphani sativi, America bor.

ALLOMYCES Butler, Phycomyc., in Ann. of Bot. XXV 1911 p. 1027.— (Etym. *allos* et *myces* fungus). — Fungus arbusculaeformis, cellula basilari unica rhizoidibus subtilibus ramosis suffulta praeditus, supra cellulam breviter furcatus, indeque in ramulos angustos fertiles radiatim divergentes v. cellulae perdurantes partito; ramuli septati, sympodialiter v. dichotome divisi. Sporangia acropleurogena, solitaria v. catenulata, ovoidea, papillis evacuationis munita; zoosporae singulatim emergentes oblongae v. ellipsoideae, 1-ciliatae, initio amoeboideae, monoplaneticae. Sporae perdurantes ovoideae,

crasse tunicatae. Germinatio non visa. Membranae omnes cellulosa carentes.

1. **Allomyces arbuscula** Butl., l. c., cum tab. — Cellula basilari 100-200 × 60-100; ramuli fertiles 250 × 15-25; sporangia 40-70 × 30-40, utrinque rotundata v. truncata, papillis 1-4 evacuationis munita; cellula perdurans, singula, terminalis basi truncata apice rotundata, 40-60 × 30-45, exosporio crassiusculo, brunneo. 3420

Hab. in aqua (non stagnante), Pusa et Poona, Ind. or., ad Muscas etc. emortuas. — Habitus quasi *Saprolegniae.*

ZOOPHAGUS Sommerstorff, Oesterr. Bot. Zeitschr. LXI, 1911, p. 361 n. 10, p. 12 extr. — Hyphae cylindricae, rectae, rigidae, typice simplices et continuae, lateraliter ramulos breves perpendiculariter insertos gerentibus. Fructificatio distincta nulla adhuc observata. Aquaticus, inter algas nidulans, animalcula rotatoria ramis suis brevibus captans.

1. **Zoophagus insidians** Sommerst., l. cit., tab. 5-6; Mirande, Bull. Soc. Myc. de Fr., t. 36., 1920, p. 47, cum icon. — Hyphis cylindricis, rectis, aequalibus, 6-7 μ diam., rigidis, typice simplicibus, continuis vel, ubi plasmate elapso, septis curvulis partitis, ramulos breves laterales plus minusve perpendiculariter insertos gerentibus; ramulis breviter cylindraceis, subaequalibus, 20 × 3, apice substantia granulosa valde refringente repletis, animalcula (Rotatoria) captantibus et in eorum corpore irregulariter abunde crescentibus. Fructificatio nulla distincte visa. 3421

Hab. in aqua inter Cladophoras, eisque saepe adhaerens, prope Gratwein in Styria (Somm.) et in horto bot. Gratz, Austria (Palla).

JARAIA Nêmec, Zur Kenntnis der niederen Pilze. VI. Eine neue Saprolegniacee Bull. internat. Acad. Sci. Bohême 18. Praga 1913, p. 18-31.— Zoosporangia formae variabilis, in eminentias ostiolares cylindraceas plerumque 2 vel 3-6, hinc inde producta. Antheridium late in oogonio penetrante. Mycelium radicicolum parasiticum intercellulare.

1. **Jaraia Salicis** Nêmec, l. cit., cum tab. et icon.— Zoosporangiis immersis parvis, magnitudine et forma variabilibus, numerosis, ex hyphis consequenter formatis; oogoniis collo ostiolari destitutis et tunc oosporis ob lacerationem oogonii emissis. Fructificatio in stratu meristemali ad apicem radicum. 3422

Hab. in apicibus radicalibus hypertrophicis Salicis purpureae, aqua immersis, in Bohemia.

ANISOMYXA Nêmec, Zur Kenntnis der niederen Pilze V., in Bull. Int. Ac. Sc. Bohême, 18., Praga 1913, p. 18-31.— Status vegetativus intracellularis plasmodiiformis juventute uninucleatus, demum multinucleatus, soros zoosporangiferos efformans; zoosporae uniciliatae. — Gen. *Rhizomyxae* Borzi proximum et *Sorolpidio* etiam nonnullis notis affine.

1. **Anisomyxa Plantaginis** Nêmec, l. c., cum tab. et icon.— Zoosporangiis rotundatis, autumno parvis, 5,8 × 5,8-7,2, pseudoparenchymam simulantibus; aestate majoribus et magnitudine variabilibus 4,5-6 × 10,5-15; zoosporis rotundatis 1,5 × 1,5-1,8. 3423

Hab. in radicibus Plantaginis lanceolatae, Bohemia.

Genus incertae sedis et nomine nobis tantum notum.

1. **Enterobryus compressus** R. Thaxter, Bot. Gazette 69., 1920, p. 24, tab. V fig. 47-52. — E hyalinus pallide sordide flavescens; cellula basali magna et crasse tunicata, parte distali latiori, 500-850 × 28-35, recta v. saepe basi leniter curvata; pedicello e cellula basali bene definito, leniter brunneo flavescenti; cellulis superioribus articulatis, cellulis singulis articulis e quarto v. quinto sensim ad apicem latioribus et subcompressis (singulis circiter 8 μ altis, 35 μ latis, 18 μ crassis), omnibus spora solitaria repletis. 3424

Hab. in regione anali Passali sp., Dominica, America.

Fam. 4. Peronosporaceæ De Bary

CYSTOPUS Lév.— Syll. VII p. 233, IX p. 340, XI p. 242, XIV p. 458, XVI p. 396, XVII p. 519, XXI p. 858.

1. **Cystopus austro-africanus** (H. et P. Syd.) Sacc. et Trott., *Albugo austro-africana* H. et P. Sydow, Ann. Mycol. X, 1912, p. 437. — Soris amphigenis, plerumque epiphyllis, rotundatis v. ellipticis minutis, 0,5-1 mm. diam., flavidis; conidiophoris late clavatis, hyalinis, 35-42 × 16-18; conidiis hyalinis v. dilute flavidis, ubique aequaliter tenuiterque tunicatis, globosis v. subglobosis, 14-20 μ diam.; terminalibus majoribus 20-24 × 16-21, membrana 1-2 μ cr.; oospo- 3425

ris in contextu foliorum evolutis, globosis, castaneo-brunneis, ca. 50 μ diam., papillis minutis aequaliter denseque obsitis.

Hab. in foliis Aizoi rigidi [Aizoaceae], Humewood Port Elizabeth, Cape Prov., Africa austr. (E. M. Doidge). — *Cyst. Lepigoni* proximus sed differt oosporis obscurioribus et conidiis minoribus.

2. **Cystopus Eurotiae** (W. Tranzsch.) Sacc. et Trott., *Albugo E.* Tranzsch., Mycoth. Ross. fasc. III-IV, an. 1911, n. 101. — Sori hypophylli, rotundati, sparsi, rarius confluentes, albidi. Conidiophori clavulati, circa 30 × 15. Conidia subglobosa vel late ovata, 16-22 16-18 μ, membrana hyalina, tenui, ad medium intus annulo leniter incrassato, non semper bene conspicuo, cincta. Oosporae foliicolae, globosae, brunneae, maturae fere opacae, 39-55 μ diam., a superficie visae verrucis magnis, irregularibus, angulatis, reticulatim confluentibus separatis, tectae; sub his verrucis episporium minute denseque verruculosum apparet (oosporae juniores tantum verruculosae sunt); in sectione optica episporium e baculis brunneis dispositis constructum apparet, quae bacula verrucis claviformibus, in parte superiore dilatata dilutius coloratis et extra plus minus concavis superata sunt. 3426

Hab. in foliis vivis Eurotiae ceratoidis (L.) C.A.M. [Chenopodiaceae], in prov. Ufa, Rossiae orientalis, prope Durassowo, (Serebrianikow).

3. **Cystopus Evansii** (H. et P. Syd.) Sacc. et Trott., *Albugo Evansii* H. et P. Sydow, Ann. Mycol. X, 1912, p. 437. — Soris foliicolis v. saepissime caulicolis, rotundatis v. in caulibus oblongis, circ. $^1/_2$-1,5 mm. long.; conidiophoris oblongo-clavatis, 35-45 × 14-17, hyalinis; conidiis subglobosis, ovatis v. oblongis, hyalinis, 16-28 × 13-20, membrana ad medium annulatim incrassata; oosporis nondum visis. 3427

Hab. in foliis caulibusque Nemesiae sp. [Scrophulariaceae], Hoogfonteim, Ladybrand, Africae austr. (C. P. van der Merwe).

*) **PHYTOPHTHORA** De Bary. — Syll. VII p. 237, IX p. 341, XVI p. 396, XXI p. 859.

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*) Cfr. Wilson, *Monogr. Phytopht.*, in « Mycologia » 1914, p. 54. Rosenbaum, *Studies of the genus Phytophthora*, in Journ. of Agricult. Research, Washingt., Febr. 1917, v. VIII, p. 233-276, tab. 71-77.

Conspectus synopticus et systematicus specierum plurimarum gen. *Phytopthorae*, sec. Cl. ROSENBAUM in l. c.

I. Oogonia antheridio plerumque lateraliter disposito praedita Typ. PH. CACTORUM

A. Papilla apicali non prominenti sed lata et depressa; conidia circ. 39,86 × 25,33, oosporae 29,5 µ circ. cr. *Ph. Syringae*

B. Papilla apicali prominenti.

1. Chlamydosporae nullae; moda conidiorum 32-35 × 25-26.

* Oosporarum moda 29-86, diam. circ. 30-22 *Ph. Fagi*

** Oosporarum moda 26, diam. circ. 27 *Ph. Cactorum*

2. Chlamydosporae copiosae; moda conidiorum 37-38 × 29-30.

* Chlamydosporarum moda 28,86 × 13,15; conidiorum ratio circ. 1,25 *Ph. Nicotianae*

II. Oogonia antheridio plerumque basi disposito praedita Typ. PH. PHASEOLI

A. Conidiorum ratio ultra 1,75.

1. Conidia circ. 43,64 × 23,39 chlamydosporae circ. 31,15 µ diametro *Ph. parasitica*

B. Conidiorum ratio infrà 1,75.

1. Conidia parva, infra 30 × 20.

* Oospora in culturis copiosa, antheridia adsunt *Ph. Phaseoli*

** Oospora in culturis nulla, v. pauca et tunc antheridiis destituta v. antheridio indefinito praedita *Ph. infestans*

2. Conidia magna, ultra 30 × 20.

* Papilla apicali non prominenti sed lata et depressa Oosporae 35,78 µ circ. cr.; conidia circ. 47,93 × 26,20. *Ph. erythroseptica*

** Papilla apicali prominula; oosporae 32,42 µ cr. conidia circ. 44,65 × 29,45 *Ph. Arecae*

III. Antheridia v. situ ejusdem hucusque ignoti; chlamydosporae praesentes v. nullae Typ. PH. FABERI

A. Chlamydosporae latae, diam. ultra 35 µ.

1. Chlamydosporae diam. circ. 38,98 praeditae; conidiorum ratio 1,47 *Ph. Faberi*

B. Chlamydosporae parvae, diam. infra 35 µ.

1. Chlamydosporae diam. circ. 32,89 praeditae; conidiorum ratio 1,28. *Ph. Jatrophae*

1. **Phytophthora Agaves** Gandera, Mem. y Rev. Soc. Cient. « Ant. Alzate » t. 25, 1908-1909 [1909], pp. 293-305, icon. et tab. 3428

Hab. in foliis Agaves [Amaryllidaceae], in Mexico, Amer. bor.

2. **Phytophthora Allii** K. Sawada, Mycologia 1917, p. 249 (Ex Rep. Stat. Agricult. Taiwan (Formosa) p. 77, tab. 1-2. — Mycelio byssino albo; hyphis filiformibus, tenui-tunicatis, hyalinis, demum septulatis, valde ramosis, 3-8 μ cr., cellulas matricis penetrantibus; haustoriis non visis; conidiophoris filiformibus simplicibus v. pseudo-dichotome ramosis, 140-480 × 4-6; conidiis terminalibus globosis v. ovoideis v. limoniformibus, hyalinis, papillatis, papilla 5-10 μ long., 50 × 36, basi non v. crasse 1-septatis, demum 15-60 zoosporas gignentibus; oogoniis sphaericis, 20 μ d. monosporis; oosporis sphaericis, hyalinis v. pallide melleis 16-17 μ d., tunica 0,5-1,5 μ cr.; antheridiis 8-18 × 10-14. 3429

Hab. in foliis et floribus Alliii fistulosi, in Ins. Formosa (K. Sawada).

3. **Phytophthora palmivora** (Butl.) Butler, Scient. Rep. Agric. Res. Inst. Pusa, 1918-1919 [1919], p. 82. 3430

Ita vocandum est *Pythium palmivorum* Butl., Syll. XXI p. 855.

4. **Phytophthora terrestris** Sherbakoff, Phytopath. VII (1917) p. 127, cum ic. — Mycelio primo continuo deinde septato; conidiis fere terminalibus, aliquando intercalaribus, plerumque ovoideis apice papillatis sed valde variabilibus, 36-46 × 24-35; zoosporis late ellipsoideis, asymmetricis, lateraliter 2-ciliatis, 9-11 μ diam., quiescentibus globosis; chlamydosporis vulgaribus, plerumque globosis, 30-40 μ diam.; oogoniis sphaerioideis, 19-24 μ diam., basi per antheridium subglobosum penetratis; oosporis globosis 18-21 μ diam. 3431

Hab. parasitice in fructibus Lycopersici esculenti, in truncis Citri et in caulibus Lupini, nec non aperte in solis humosis, Florida, Amer. bor. — Culta in agaro farina Maydis composito, colonias peculiariter cristatas efficit.

5. **Phytophthora Nicotianae** Breda de Haan, Med. int's Lands Plantentuin 15., 1896, 107 p., 1 tav. — A *Ph. omnivora* de Bary praecipue biologice diversa quia tantum in Nicotiana viget. 3432

Hab. in foliis caulibusque nec non in radicibus Nicotianae Tabacci, cui valde noxia, in ins. Sumatra, Java, Borneo.

6. **Phytophthora Melongenae** K. Sawada, Mycologia 1917, p. 249 (Ex Rep. Agric. Stat. Taiwan (Formosa) p. 59 tab. 1-2. — Hyphis continuis, cellulas matricis penetrantibus, valde ramosis, maturis septatis; hyphis aereis plerumque simplicibus, praelongis, 4-8 μ cr., basi contorta inflata v. brevi-ramosa; haustoriis nullis; conidiophoris vix diversis, brevioribus 80 × 3-5; conidiis sphaericis ovoideis 23-72 × 20-48, plerumque 42 × 33, apice papilla hemisphaerica 3433

3-5 μ alta praeditis, usque ad 40 zoosporas gignentibus; zoosporis ovoideo-ellipsoideis 10-11 × 8 biciliatis; chlamydosporis flavido brunneis, sphaericis, 25-42 μ d.; oogoniis sphaericis 18-23 × 20-24, monosporis; oosporis globosis 17-21 μ d., tunica 2 μ cr., hyalina v. brunneola; antheridiis subsphaericis 12-16 × 10-14.

Hab. parasitica in fructibus Solani Melongenae, in Ins. Formosa (K. Sawada).

7. **Phytophthora erythroseptica** Pethyb., On the rotting of Potato tubers, in Scienc. Proc. R. Dublin Soc. n. s. XXIII p. 529-565, t. 42-44 (1913). — Mycelio ut *Ph. infestantis*, sed conidiis majoribus brevius papillatis; ovoideis v. obpiriformibus (ob subapicali constrictionem), 30 × 20; gametis ex hyphis separatis, primitus minus distinctis; oogoniis 36 μ diam. tunica hyalina praeditis; oosporis 29-30 μ diam. hinc multo minoribus quam *Ph. infestantis*. 3434

Hab. in tuberibus Solani tuberosi, quae colore rubro tinguntur in Europa et Amer. bor.

8. **Phytophthora Caricae** K. Hara, Morbi arbor., fr. Jap. p. 432, fig. 57.— Mycelii hyphis ramosis angustis, haustoriis carentibus; conidiophoris aeque ac mycelio 3-4 μ cr.; conidiis limoniformis, oblongis v. ovoideis, 40-87 × 15-25, hyalinis, papilla prominenti auctis, germinatione 8-10 zoosporas emittentibus; oosporis ignotis, chlamydosporis globosis, 20-30 μ diam., granulosis, flavidis. 3435

Hab. in fructibus Fici Caricae, Prov. Musashi, Tokyo Japoniae.

9. **Phytophthora parasitica** Dastur., Mem. Dep. Agr. India Bot. Ser. V, 1913 p. 226 tab. I-X. — Maculis amphigenis, orbicularibus, centro arescentibus, dilute umbrinis, anulatis, solitariis v. confluentibus; mycelio intermatricali ex hyphis inter-et intracellularibus, primo continuis tandem septatis 3-9 μ cr. constantibus; haustoriis sparsis, digitatis v. subglobosis, raro ramosis, sporangiophoris, 100-300 μ longis; sporangiis terminalibus, interdum intercalaribus v. lateralibus, plerumque ovoideis, subinde globosis, 25-50 × 20-40; zoosporis 8-12 × 5-8; sporis perdurantibus globosis, flavidis, 20-60 μ d., membrana crassa, levi; oogoniis et antheridiis in vitro cultis; oogoniis intercalaribus v. lateralibus, globosis, levibus v. rugosis, melleis 18-25 (medie 23,8) μ diam. pedicellis per antheridia penetrantibus; oosporis globosis, 15-20 (medie 18,6) μ diam., membrana crassa, mellea, levi. 3436

Hab. in foliis seminibusque Ricini communis et Sesami indici, in India orient.

STIGEOSPORIUM West, Ann. of Bot. XXX n. 118, p. 357 (1916), v. XXXI n. 121, p. 95 cum icon. (1917). — Mycelium ramosum ex hyphis inter-et intracellularibus continuis rarissime septatis constans; haustoriis numerosis, extremitatibus in ramulis radiatis valde dissectis; sporis perdurantibus solitariis plerumque globosis raro subglobosis et cat., membrana crassissima irregulariter intenseque colorata. — Differt a *Phytophthora* cui arcte affine, habitu symbiotico qua de causa nulla conidia normalia producuntur.

1. **Stigeosporium Marattiacearum** West, l. c., cum icon. et tab. III.— 3437
Hyphis primum hyalinis demum flavo-brunneis vacuatis 1-12 μ cr.; sporis v. intercalaribus v. terminalibus plerumque globosis 32-45 μ diam., raro subglobosis v. ovoideis v. piriformibus; exosporio tenuissimo hyalino levi, mesosporio crassissimo, 6 μ crassitudine, minute punctulato flavo irregulariter intenseque colorato, endosporio tenue 2,5 μ cr.

Hab. in radicibus subterraneis symbiotice in mycorrhizis, Marattiacearum orientalium e gen. Angiopteris, Archangiopteris, Kaulfussia, Marattia, Asia orientali, Australasia, Zeylania.

PERONOSPORA Corda — Syll. VII p. 244, IX p. 342, XI p. 243, XIV p. 458, XVI p. 397, XVII p. 521, XXI p. 862.

1. **Peronospora Pulmonariae** E. Gäumann, Bull. Soc. neuchâtel. Sc. Nat. 3438
t. XLIII, 1919, Extr. p. 8, fig. 3; Mitt. Naturf. Ges. Bern. 1919 [1920], p. 179. — Caespitulis mollissimis, griseo-albis, difficile visibilibus, tergum foliorum nonnulla parte subtegentibus; conidiophoris singulis e stomatibus exeuntibus, 200-400 μ altis, trunco 9-12 μ crasso, basi leviter tumida; conidiis paene globosis, hyalinis, 21-36, fere 25-30 longis, 20-32, fere 24-29 μ latis. Longitudine media 28,03 μ, latitudine media 26,46 μ. Oosporis ignotis.

Hab. in foliis vivis Pulmonariae officinalis, Gallia septentrionali. — *Per. Echinospermi* Sw. proxima.

2. **Peronospora Specullariae** E. Gäumann, Bull. Soc. neuchâtel. Sc. Nat. 3439
t. XLIII, 1919, Extr. p. 6, fig. 4-5; Mitt. Naturf. Ges. Bern, 1919 [1920], p. 179. — Caespitulis mollibus, griseo-flavis, totum tergum foliorum subtegentibus; conidiophoris singulis vel plurimis e stomatibus exeuntibus, 250-450 μ altis, trunco $^1/_3$-$^2/_3$ totius altitudinis efficienti, 7-13 μ crasso; ramis 5-9 ies dichotome ramosis, valde curvatis; furcis terminalibus 5-30 μ longis, rectangulis, saepe litterae graecae sigma similiter curvatis; conidiis fere hyalinis,

late ellipsoideis, 9-23, fere 12-18 μ longis, 8-20, fere 11-16 μ latis. Longitudine media, 15,94 μ, latitudine media 13,47 μ. Oosporis singulis in foliis marcidis, 27-31 μ diam., episporio laevi, 6-8 μ crasso. Oogoniis e membrana persistenti, saepe plicata, formatis, 45-50 μ diametro.

Hab. in foliis vivis Specula riae Speculi veneris (L.) DC., (in Gallia meridionali), nec non Specula riae hybridae (L.) DC. (in Gallia septentrionali). — *Per. Phytheumatis* proxima sed pluribus notis distincta.

3. **Peronospora helvetica** Gäumann, Mitt. der Naturf. Ges. Bern, 1919 [1920], p. 178. 3440

Hab. in Cerastio latifolio, in Alpibus Helvetiae.

4. **Peronospora tornensis** Gäumann, l. c. p. 181. 3441

Hab. in Cerastio alpino, Scandinavia, Islanda.

5. **Peronospora septentrionalis** Gäumann, l. c. p. 181. 3442

Hab. in Cerast. trigyno Vill., Helvetia, Norvegia, Islanda.

6. **Peronospora media** Gäumann, Mitt. Naturf. Ges. Bern, 1919 [1920], p. 183. 3443

Hab. in Stellaria media, Europa, Asia occ.

7. **Peronospora litoralis** E. Gäumann, Mitt. Naturf. Ges. Bern, 1918 (1919), p. 62, fig. 1[4]. — Synon.? *Peron. farinosa* Fr. p. p. — Caespitulis densissimis hypophyllis effusis; conidiophoris 3-16, 250-700 μ altis, dichotomice ramosis, infra 9-16 μ cr., $^1/_2$-$^3/_4$ alt. totius arboris, furcis terminalibus rectangulis rectis v. saepius leviter sigmoideo-incurvatis, 10-60 μ long.; conidiis flavidulis late ellipsoideis, plerumque 28-32 × 19-23 (usque 20-37 × 10-26); oosporis copiosis in foliis marcescentibus, brunneis, levibus, raro rugosis, 29-42 μ diam., oogoniis 35-60 μ. 3444

Hab. in foliis Atriplicis litoralis et verisimiliter etiam A. hastatae, Suecia Europa bor.

8. **Peronospora variabilis** E. Gäumann, Mitt. Naturf. Ges. Bern., 1918 (1919), p. 62 fig. 1[1], 1919 (1920) p. 184. — Syn. *P. Chenopodii* Caspary 1854, *P. effusa* var. *major* Casp. 1855 p. p. et var. *manshuriae* Naoumoff 1914, *P. epiphylla* (Pers.) Lagerh. 1891 p. p. — Caespitulis densis hypophyllis plus v. minus effusis; conidiophoris 1-9, 150-450 μ altis, 2-7-dichotomice ramosis, trunco $^1/_3$-$^2/_3$ alt. totius arboris, 8-12 μ cr.; furcis terminalibus sigmoideo-incurvatis, 20-60 μ long.; conidiis variabilibus, ellipsoideis fere papillatis, flavidulis, plerumque 25-30 × 16-20 (usque 17-40 × 12-28). — Oosporis non visis. 3445

Hab. in foliis Chenopodii albi, Wabern prope Bern Helvetia Europa, Nord-et Sud America, Asia.

9. **Peronospora effusa** Grév. — Sacc., Syll. VII p. 256 — var. **manshurica** Naoumoff, Bull. Soc. Mycol. Fr. 1914 p. 72, t. I f. I. — Differt a typo atque a var. *minor* Caspary conidiis, fere globosis vel late ellipsoideis, 20-22 μ diam. vel 18-21 × 21-24, et conidiophoris minus curvulis, paulo ramosis, ramis extimis brevioribus, saepius 6 μ raro 9-12 μ, rectis curvulisve. 3446

Hab. in foliis juvenilibus Chenopodii albae, in prov. Austro-Ussuriensi (Rossiae-Orient.).

10. **Peronospora Boni Henrici** E. Gäumann, Mitt. Naturf. Ges, Bern, 1918 (1919), p. 63 fig. 1^3. — Syn. *Peron. nivea* Unger 1847 p. p. — Caespitulis hypophyllis densissimis plus minus effusis, brunneo-violaceis; conidiophoris singulis v. plurimis (1-3), 200-400 μ altis, 4-9-dichotomice ramosis, trunco 7-10 μ cr. $^1/_3$-$^2/_3$ alt. totius arboris; furcis terminalibus rectangulis, leviter curvatis, 20-65 μ long.; conidiis globosis v. latissime ellipsoideis, leviter brunneo-violaceis, plerumque 24-28 × 22-25 (usque 17-34 × 16-31). Oosporis non visis. 3447

Hab. in foliis Chenopodii Boni Henrici, Robberge prode Cortaillod, Helvetia.

11. **Peronospora Chenopodii ficifolii** Sawada, Agr. Exp. Sta. Formosa, Circ. Publ. n. 101, 1916, p. 9, cum icon.; The Formosan Agr. Review n. 155, 1916, p. 29, cum icon.; Mycologia 1919, p. 83. — Maculis hypophyllis pallide griseo-purpuraceis, rotundatis v. irregularibus, 1-27 mm. diam., quandoque late indeterminateque effusis; hyphis intercellularibus, hyalinis, continuis, 7-12 μ cr., haustoriis simplicibus v. apice ramosis, saepe plus minus spiralibus, 10-20 × 3-4; conidiophoris caespitosis, 3-6 raro 7 dichotomice ramosis, ramis omnibus apice incurvatis, 240-500 μ long. 8-14,4 μ cr.; conidiis oblongis v. subellipsoideis, basi papillatis, fuligineis v. cinereis, 26-36 × 17-25; statu oogonico ignoto. 3448

Hab. in foliis Chenopodii ficifolii, Taiwan, Formosa, Japonia.

12. **Peronospora Chenopodii glauci** E. Gäumann, Mitt. Naturf. Ges. Bern, 1918 (1919), p. 63. — Caespitulis griseo-violaceis, densis, hypophyllis late effusis; conidiophoris plerumque 3-5 (usque 1-8) 200-450 μ altis, 3-7 dichotomice ramosis, trunco 7-11 μ cr., $^1/_3$-$^2/_3$ alt. totius arboris; furcis terminalibus rectangulis, rectis v. leniter curvatis, 10-35 μ long.; conidiis ellipsoideis, leviter brunneis, variabilibus, raro papillatis, plerumque 26-34 × 16-19 (usque 19-40 3449

» 10-23); oosporis maturis non visis, immaturis 32-40 μ diam.

Hab. in foliis Chenopodii glauci, prope Berolinum, Germania (P. Sydow, Myc. March. 3595).

13. **Peronospora muralis** Gäumann. Mitt. d. Naturf. Ges. Bern. 1919 [1920], p. 184. 3450

Hab. in Chenopodio murale, Europa, Amer. austr.

14. **Peronospora Chenopodii polyspermi** E. Gäumann. Mitt. Naturf. Ges. Bern, 1918 (1919), p. 64. — Caespitulis griseo-brunneis, densis, tergum foliorum nonnulla parte tegentibus; conidiophoris 2-9, 350-650 μ alt., 3-7-dichotome ramosis, trunco 7-15 μ cr. fere $^2/_3$-$^3/_4$ alt. totius arboris, basi saepe leniter tumida; furcis terminalibus rectangulis, curvulis, 8-25 μ long.; conidiis late ellipsoideis, paullo brunneo-violaceis, raro papillatis, plerumque 19-23 » 13-17 (usque 11-27 » 10-24). Oosporis non visis. 3451

Hab. in foliis Chenopodii polyspermi, prope Biel, Helvetia.

15. **Peronospora Chenopodii rubri** E. Gäumann, Mitt. Naturf. Ges. Bern, 1918 (1919), p. 64. — Caespitulis griseo-violaceis, densis hypophyllis, plus minus effusis; conidiophoris 2-6, 300-700 μ alt., fere 3-5-dichotomice ramosis, trunco 8-13 μ cr., $^1/_2$-$^2/_3$ alt. totius arboris; furcis terminalibus rectangulis, rectis v. curvulis, 15-50 μ long.; conidiis ellipsoideis paullo brunneo-v. griseo-violaceis, plerumque 26-30 » 19-22 (usque 17-37 » 12-31). Oosporis non visis. 3452

Hab. in foliis Chenopodii rubri, prope Berolinum Germaniae (Sydow, Myc. March. 1534).

16. **Peronospora Kochiae** E. Gäumann, Mitt. Naturf. Ges. Bern, 1918 (1919), p. 64. — Caespitulis leviter flavis, mollibus, aegre visibilibus; conidiophoris solitariis, 300-500 μ alt., 5-9 dichotomice ramosis, trunco 6-11 μ cr., $^1/_3$-$^3/_4$ alt. totius arboris; furcis terminalibus rectangulis, leviter curvatis 10-45 μ long.; conidiis late ellipsoideis paullo brunneo-violaceis, raro papillatis, plerumque 25-29 » 19-23 (usque 20-36 » 16-28). Oosporis non inventis. 3453

Hab. in foliis Kochiae sedoidis Schr., Nowotscherkask, Rossia merid.-orient. (O. Treboux, in Sydow Phycom. et Protom. 333).

17. **Peronospora vistulensis** Wroblewski, Bull. Acad. Sc. Cracovie, ser. B. 1915. n. 8-10 p. 243. — Caespitulis densis, depressis, late effusis, totam plantam obtegentibus griseo-violaceis; conidiophoris plerumque caespitose erumpentibus 200-300 μ alt. 8 μ cr., apice 4-8 ramosis, ramis elongatis rectis, ultimis angulum rectum efforman- 3454

tibus, acutis, 12-21 μ long., rigidis v. parum incurvatis; conidiis polymorphis, semper magnis ovoideis elongato-ellipsoideis raro ellipsoideis, obtusis v. parum acutis, griseo-flavescentibus 29-45 × 16-20. Oosporis non visis.

Hab. in Salsola Kali, Ciechocinek Poloniae (Zalewski), Salsola Kali var. Tragus, Soska Kempa prope Warschau Praga (Lapczynski). — *Per. effusae* var. *majoris* Casp. proxima, differt apicibus rectis conidiis majoribus.

18. **Peronospora alpestris** Gäumann, Mitt. Naturf. Ges. Bern., 1919 [1920], p. 181. 3455

Hab. in Helianthemo alpestre (Jacq.) Dun., Helvetia, Gotlandia.

19. **Peronospora Radii** de Bary. — Syll. VII p. 254 — var. **epiphylla** Poirault, Bull. Assoc. Nat. de Nice, 1915, p. 9 (extr.). — A typo distinguitur conidiophoris aeque violaceis, per stomata exeuntibus, non trans ipsam epidermidem (ut in typo); oosporis non visis. 3456

Hab. in foliis Chrysanthemi Myconis, Cap. d'Antibes, Alp. Marit. Galliae. — In eodem Chrysanthemo occurrit quoque typus in capitulis.

20. **Peronospora Alliariae Wasabi** E. Gäumann, Beih. Bot. Centralbl., XXXV, Abt. 1., 1918, p. 129. — Caespitulis densissimis; conidiophoris singulis (?) e stomatibus erumpentibus, 550-650 μ altis, furcis literae « sigma » similiter arcuatis; conidiis late ovoideis 14-27, fere 21-24 μ longis, 13-22, fere 18-21 μ latis, longitudine media 20,42 μ, latitudine media 18,69 μ; oogoniis et oosporis ignotis. 3457

Hab. in foliis Alliariae Wasabi (Maxim) Prantl. — *Per. parasiticae* affinis.

21. **Peronospora Alyssi calycini** E. Gäumann, Beih. Bot. Centralbl., XXXV, 1918, Abt. 1., p. 129, fig. 4. — Caespitulis raris, difficile visibilibus; conidiophoris singulis e stomatibus erumpentibus, 250 μ altis, furcis inaequalibus, fere 20 μ longis forcipi aut literae « sigma » similibus; conidiis ellipsoideis, 16-32, fere 22-27 μ longis, 13-24, fere 16-21 μ latis, longitudine media 24,61 μ, latitudine media 16,69 μ; oogoniis et oosporis ignotis. 3458

Hab. in ramis et foliis Alyssi calycini L. — An huc Alyssym campestre L. addendum sit?

22. **Peronospora Alyssi incani** E. Gäumann, Beih. Bot. Centralbl. XXXV, Abt. 1., 1918, p. 130. — Caespitulis densis, tergum foliorum omnino protegentibus; conidiophoris pluribus (3-9) coalitis, gracilibus, 300-1000, fere 500-600 μ altis, furcis brevibus, literae « sigma » 3459

similibus, imperfecte curvatis; conidiis ellipsoideis aut globosis, 14-26, fere 17-22 μ longis, 10-23, fere 16-21 μ latis, longitudine media 19,94 μ, latitudine media 18,22 μ; oogoniis et oosporis ignotis.

Hab. in foliis Alyssi incani L. — *Per. parasiticae* affinis.

23. **Peronospora Arabidis alpinae** E. Gäumann, Beih. Bot. Centralbl. XXXV, Abt. 1, 1918, p. 130, fig. 7. — Caespitulis raris, in tergo foliorum expansis; conidiophoris singulis e stomatibus erumpentibus, 400 μ altis, furcis inaequaliter longis (ramus maior 30-80 μ, ramus minor 20-40 μ), aliquantum curvatis, parte extrema inflexis, conidiis late ellipsoideis, 12-31, fere 21-26 μ longis, 12-28, fere 20-24 μ latis, longitudine media 23,11 μ latitudine media 20,92 μ; oogoniis et oosporis ignotis. 3460

Hab. in foliis Arabidis alpinae L. et A. albidae Stev., Helvetia or. — *Per. parasiticae* affinis.

24. **Peronospora Arabidis glabrae** E. Gäumann, Beih. Bot. Centralbl. XXXV, Abt. 1, 1918, p. 130. — Caespitulis rarissimis, caules et inflorescentias protegentibus, conidiophoris fere singulis e stomatibus exeuntibus, 300-400 μ altis, furcis 30-80 μ longis, literae sigma similiter curvatis; conidiis late ellipsoideis, 12-31, fere 21-27 μ longis, 12-26 fere 21-24 μ latis, longitudine media 23,77 μ, latitudine media 21,91 μ; oogoniis et oosporis ignotis. 3461

Hab. Arabidem glabram Bernh. — *Peron. parasiticae* affinis.

25. **Peronospora Arabidis hirsutae** E. Gäumann, Beih. Bot. Centralbl. XXXV, Abt. 1, 1918, p. 130. — Caespitulis densis, in caulibus et foliis expansis; conidiophoris plurimis (1-6) coalitis, 400 μ altis, furcis 30-80 μ longis, literae « sigma » similiter curvatis; conidiis ellipsoideis, 11-23, fere 15-18 μ longis, 8-20, fere 11-16 μ latis, longitudine media 16,12 μ, latitudine media 13,92 μ; oogoniis et oosporis ignotis. 3462

Hab. Arabidem hirsutam (L.) Scop. et A. arenosam Scop. — *Per. parasiticae* affinis.

26. **Peronospora Arabidis oxyphyllae** E. Gäumann, Beih. Bot. Centralbl. XXXV, Abt. 1, 1918, p. 130. — Caespitulis densis, in tergo foliorum expansis; conidiophoris, 5-8 ies ramosis, singulis vel plurimis (1-8) e stomatibus exeuntibus, 120-300 μ altis, ramis undulatis, furcis literae sigma similiter curvatis; conidiis ellipsoideis, 16-29, fere 21-25 μ longis, 12-23, fere 16-19 μ latis, longitudine media 23,05 μ latitudine media 18,03 μ; oogoniis et oosporis ignotis. 3463

Hab. Arabidem oxyphyllam Greene. — *Per. parasiticae* affinis.

27. **Peronospora Arabidis Turritae** E. Gäumann, Beih. Bot. Centralbl., XXXV, Abt. 1, 1918, p. 130. — Caespitulis raris, in tergo foliorum expansis: conidiophoris singulis e stomatibus exeuntibus, 200-250 µ altis, furcis 30-80 µ longis, literae sigma similiter curvatis; conidiis late ellipsoideis, 11-24, fere 16-20 µ longis, 9-23, fere 15-19 µ latis, longitudine media 19,17 µ, latitudine media 17,32 µ; oogoniis et oosporis ignotis. 3464

Hab. Arabidem Turritam, Helvetia or.— *Per. parasiticae* affinis.

28. **Peronospora Arabidopsidis** E. Gäumann, Beih. Bot. Centralbl., XXXV, Abt. 1., 1918, p. 139. — Syn. *Per. parasitica* f. *Sisymbrii Thaliani* Schneid. 1865 in Rabenh. Fungi europ. 1364 — Caespitulis raris, in tergo foliorum expansis; conidiophoris singulis e stomatibus exeuntibus, 400 µ altis, furcis 10-60 µ longis, literae « sigma » similiter curvatis; conidiis parvulis, fere globosis, 9-24, fere 14-19 µ longis, 9-21, fere 13-19 µ latis, longitudine media 16,30 µ, latitudine media 14,50 µ; oogoniis et oosporis ignotis. 3465

Hab. Arabidopsidem Thalianam (L.) Heynhold [Stenophragma Thalianum (L.) Cel.].

29. **Peronospora Barbareae** E. Gäumann, Beih. Bot. Centralbl., XXXV, Abt. 1., 1918, p. 131. — Caespitulis densissimis, in tergo foliorum expansis; conidiophoris plurimis (2-6) coalitis, 250-300 µ altis, furcis literae « sigma » similiter curvatis vel parte ultima inflexis; conidiis globosis, 11-25, fere 14-18 µ longis, 9-18, fere 13-16 µ latis, longitudine media 16,58, latitudine media 14,26 µ; oogoniis et oosporis ignotis. 3466

Hab. Barbaream vulgare R. Br.— *Per. parasiticae* affinis.

30. **Peronospora Berteroae** E. Gäumann, Beih. Bot. Centralbl., XXXV, Abt. 1., 1918, p. 131. — Caespitulis rarissimis; conidiophoris singulis e stomatibus exeuntibus, 150-450 µ altis, paullum ramosis, furcis brevibus, irregularibus; conidiis fere globosis, 12-21, fere 16-18 µ longis, 12-20, fere 15-17 µ latis, longitudine media 17,36 µ, latitudine media 16,04 µ; oogoniis et oosporis ignotis. 3467

Hab. Berteroam incanam (L.) DC.— *Per. parasiticae* affinis.

31. **Peronospora Gäumanniana** Jaap in E. Gäumann, Beih. Bot. Centralbl. XXXV, Abt. 1, 1918, p. 132. — Caespitulis densis, in tergo foliorum expansis; conidiophoris plurimis (2-8) coalitis, 300-500 µ altis, furcis 20-65 µ longis, literae « sigma » similiter curvatis, sed saepe 3468

parte ultima inflexis; conidiis late ellipsoideis, 14-29, fere 19-23 μ longis, 11-25, fere 14-21 μ latis, longitudine media 21,31 μ, latitudine media 17,95 μ; oosporis et oogoniis ignotis.

Hab. Berteroam mutabilem DC.—*Per. parasiticae* affinis.

32. **Peronospora Biscutellae** E. Gäumann, Beih. Bot. Centralbl., XXXV, Abt. 1, 1918, p. 131. — Caespitulis rarissimis, in tergo foliorum expansis; conidiophoris gracillimis, e singulis stomatibus exeuntibus, 700 μ altis, furcis 30-80 μ longis, literae « sigma » similiter curvatis; conidiis fere globosis, 11-23, fere 14-19 μ longis, 9-20, fere 13-17 μ latis, longitudine media 17,02 μ, latitudine media 15,69 μ; oogoniis et oosporis ignotis. 3469

Hab. Biscutellam laevigatam L., Helvetia, Bavaria.—*Per. parasiticae* affinis.

33. **Peronospora Brassicae** E. Gaümann, Beih. Bot. Centralbl., XXXV, Abt. 1., 1918, p. 131; Mitt. Naturf. Ges. Bern, 1919, Heft. V.— Caespitulis raris, in caulibus, foliis et cotyledonibus expansis; conidiophoris fere singulis vel binis e stomatibus exeuntibus, 400 μ altis, furcis literae « sigma » similiter curvatis vel parte ultima inflexis; conidiis leviter ellipsoideis, 12-28, fere 16-22 μ longis, 11-23, fere 16-19 μ latis, longitudine media 19,65 μ, latitudine media 17,42 μ; oogoniis e tunica persistenti formatis singulis in foliis, 35-50, fere 40 μ diam.; oosporis globosis, 25-30, fere 28 μ diam. 3470

Hab. Brassicam Napum L., Brass. oleraceam L., Brass. Rapam L. et nonnullas varietates harum specierum, nec non in Raphano sativo, Sinapide alba et arvensi, Europa, Asia, America. — *Per. parasiticae* affinis.

34. **Peronospora Buniadis** E. Gäumann, Beih. Bot. Centralbl., XXXV, Abt. 1, 1918, p. 132. — Caespitulis raris, in tergo foliorum expansis; conidiophoris plurimis (1-9) coalitis, 300-500 μ altis, furcis 15-80 μ longis, literae « sigma » similiter curvatis; conidiis late ellipsoideis, 16-32, fere 21-26 μ longis, 12-26 fere 19-23 μ latis, longitudine media 22,74 μ, latitudine media 20,30 μ; oogonis et oosporis ignotis. 3471

Hab. Buniadem orientalem L.— *Per. parasiticae* affinis.

35. **Peronospora Calepinae** E. Gäumann, Beih. Bot. Centralbl., XXXV, Abt. 1., 1918, p. 132. — Caespitulis densis, in caulibus, inflorescentiis et in tergo foliorum expansis; conidiophoris singulis vel plurimis (1-3) e stomatibus exeuntibus, 300-700, fere 400-500 μ altis, furcis 30-80 μ longis, literae « sigma » similiter curvatis; conidiis late ellipsoideis, 12-33, fere 19-24 μ longis, 9-24, fere 16-20 μ latis, 3472

longitudine media 22,46 μ, latitudine media 18,74 μ; oogoniis e tunica persistente formatis, 35-60, fere 45-50 μ diam.; oosporis globosis, 28-37, fere 33-35 μ diam.

Hab. Calepinam irregularem (Asso) Thellung. — *Per. parasiticae* affinis.

36. **Peronospora Camelinae** E. Gäumann, Beih. Bot. Centralbl. XXXV, Abt. 1., 1918, p. 132 fig. 13. — *Peronos. parasitica* f. *Camelinae* J. Kühn 1864, in Rabenh. Fungi europ. 790 b. — Caespitulis raris, in caulibus, foliis et siliquis expansis; conidiophoris plurimis (2-3) coalitis, 250-309 μ altis, furcis brevibus, irregularibus; conidiis late ellipsoideis, 17-28, fere 21-24 μ longis, 12-24, fere 18-21 μ latis, longitudine media 22,47 μ, latitudine media 19,25 μ; oogoniis frequentissimis in caulibus, e tunica persistenti formatis; ellipsoideis, 43-58, fere 51-54 μ longis, oosporis globosis, 30-34 μ diam. 3473

Hab. Camelinam sativam (L.) Crantz et probabiliter C. microcarpam Andrrz., Europa, Africa bor.

37. **Peronospora parasitica** (Pers.) De By. — Syll. VII, P. 1., p. 249, p. p. — E. Gäumann, Beih. Bot. Centralbl., XXXV, Abt. 1., 1918, p. 133; Mitt. Naturf. Ges. Bern, 1919, Heft V. — Verisimiliter in Capsella tantum vigens (C. Bursa pastoris, C. pauciflora Koch), Europa, Asia, America bor. 3474

38. **Peronospora Dentariae** Rabh. — Syll. VII, I, p. 249, p. p.; *Per. conferta* Ung. 1847, p. 314 ex p. 3475

Hab. Cardaminem amaram, hirsutam, pinnatam, pratensem, Europa et Amer. bor. — *Per. parasiticae* affinis.

39. **Peronospora Cardamines laciniatae** E. Gäumann, Beih. Bot. Centralbl. XXXV, Abt. 1, 1918, p. 133. — Caespitulis raris, in tergo foliorum expansis; conidiophoris singulis e stomatibus exeuntibus, 150-300 μ altis, furcis literae « sigma » similiter curvatis vel parte ultima inflexis; conidiis ellipsoideis 12-28, fere 18-22 μ longis, 11-21, fere 12-18 μ latis, longitudine media 19,70 μ, latitudine media 16,23 μ; oogoniis et oosporis ignotis. 3476

Hab. Cardaminem laciniatam Wood et probabiliter Card. bulbiferam (L.) Crantz. — *Per. parasiticae* affinis.

40. **Peronospora Cheiranthi** E. Gäumann, Beih. Bot. Centralbl. XXXV, Abt. 1, 1918, p. 134. — *Per. parasitica* f. *Cheiranthi* Fuck., Fungi rhenani 1501, f. *Cheiranthi-cheiri* Roumeg. 1884, Fungi gall. exs. 2926. — Caespitulis densissimis, in caulibus, inflorescentiis et foliis expansis; conidiophoris plurimis (1-8) coalitis, 400-500 μ altis, va- 3477

riabilibus, furcis acutangulo-divergentibus vel arcuatis vel undulatis, 15-85 μ longis, 12-24, fere 16-21 μ latis, longitudine media 23-19 μ, latitudine media 18,23 μ; oogoniis et oosporis ignotis.

Hab. Cheiranthum Cheiri L.

41. **Peronospora Chorisporae** E. Gäumann, Beih. Bot. Centralbl. XXXV, Abt. 1, 1918, p. 134. — Caespitulis raris, in tergo foliorum expansis; conidiophoris 300-400 μ altis, furcis 40-90 μ longis, literae « sigma » similiter curvatis; conidiis ellipsoideis, 19-29, fere 24-27 μ longis, 17-26, fere 21-24 μ latis, longitudine media 25,14 μ, latitudine media 22,72 μ; oogoniis et oosporis ignotis. 3478

Hab. Chorisporam tenellam DC.—*Per. parasiticae* affinis.

42. **Peronospora Conringiae** E. Gäumann, Beih. Bot. Centralbl. XXXV, Abt. 1., 1918, p. 134. — Caespitulis densis, in tergo foliorum expansis; conidiophoris plurimis (2-3) coalitis, gracilibus, 500-600 μ altis, furcis literae « sigma » similiter curvatis vel parte ultima inflexis; conidiis parvulis, late ellipsoideis, 12-21, fere 14-16 μ longis, 11-15, fere 13-15 μ latis, longitudine media 15,39 μ, latitudine media 13,71 μ; oogonis et oosporis ignotis. 3479

Hab. Conringiam orientalem Dum. — *Per. parasiticae* affinis.

43. **Peronospora Coronopi** E. Gäumann, Beih. Bot. Centralbl., XXXV, Abt. 1., 1918, p. 138; Mitt. Naturf. Ges. Bern. 1919 [1920] p. 179.— Syn. *Peronospora Lepidii* (Mc Alp.) Wilson 1914 p. p. — Caespitulis densissimis, in tergo foliorum expansis; conidiophoris plurimis (4-6) coalitis, 250-400 μ altis, furcis literae « sigma » similiter curvatis, sed parte ultima rami longioris inflexis; conidiis longe ellipsoideis, mutabilibus, 14-31, fere 21-27 μ longis, 11-24, fere 16-19 μ latis, longitudine media 23,16 μ, latitudine media 18,01 μ; oogoniis et oosporis ignotis. 3480

Hab. Coronopum didymum (L.) Smith (Senebiera pinnatifida DC.), Rep. Argentina, Amer. austr.

44. **Peronospora Dentariae macrophyllae** E. Gäumann. Beih. Bot. Centralbl. XXXV, Abt. 1., 1918, p. 133. — Caespitulis raris, in tergo foliorum expansis; conidiophoris plurimis (6-7) coalitis, 300-400 μ altis, furcis 30-80 μ longis literae « sigma » similiter curvatis, vel parte ultima inflexis; conidiis ellipsoideis, 16-29, fere 21-26 μ longis, 12-24, fere 18-21 μ latis, longitudine media 23,14 μ, latitudine media 18,81; oogoniis et oosporis ignotis. 3481

Hab. Dentariam macrophyllam Bge. — *Per. parasiticae* affinis.

45. **Peronospora Diplotaxidis** E. Gäumann, Beih. Bot. Centralbl. XXXV, Abt., 1., 1918, p. 134. — Caespitulis rarissimis, in tergo foliorum expansis; conidiophoris singulis e stomatibus exeuntibus, 300-400 μ altis, furcis irregularibus, fere brevibus; conidiis ellipsoideis 12-26, rare 18-21 μ longis, 11-27, fere 15-19 μ latis, longitudine media 18,88 μ, latitudine media 16,52 μ; oogoniis et oosporis ignotis. 3482

Hab. Diplotaxidem tenuifoliam (L.) DC.—*Per. parasiticae* affinis.

46. **Peronospora Drabae** E. Gäumann, Beih. Bot. Centralbl. XXXV, Abt. 1., 1918, p. 134. — Caespitulis rarissimis, in tergo foliorum expansis; conidiophoris singulis e stomatibus exeuntibus, 300-400 μ altis, furcis fere brevibus, literae « sigma » similiter curvatis vel irregularibus; conidiis parvis, ellipsoideis, 11-24, fere 16-21 μ longis, 9-21, fere 14-18 μ latis, longitudine media 17,64 μ, latitudine media 15,81 μ; oogoniis et oosporis ignotis. 3483

Hab. Drabam carolinianam Walt. et D. nemorosam L. — *Per. parasiticae* affinis.

47. **Peronospora Erophilae** E. Gäumann, Beih. Bot. Centralbl. XXXV, Abt. 1., 1918, p. 135. — *Per. parasitica* for. *Drabae* Frank 1877, in Rabenh., Fungi europ. 2346. — Caespitulis densissimis, in toto tergo foliorum expansis; conidiophoris fere plurimis (1-6) e stomatibus exeuntibus, gracilibus, 400 μ altis, literae « sigma » similiter curvatis vel irregularibus; conidiis parvulis, late ellipsoideis, 11-21, fere 13-16 μ longis, 8-18, fere 11-14 μ latis, longitudine media 15,17 μ, latitudine media 13,11 μ; oogoniis et oosporis ignotis. 3484

Hab. Erophilam vernam (L.) E. Mey.

48. **Peronospora Erucastri** E. Gäumann, Beih. Bot. Centralbl., XXXV, Abt. 1., 1918, p. 135. — Caespitulis rarissimis, in tergo foliorum expansis; conidiophoris plurimis (2-3) e stomatibus exeuntibus, 300 μ altis, furcis literae « sigma » similiter curvatis vel parte ultima inflexis; conidiis ellipsoideis, mutabilibus, 14-32, fere 17-24 μ longis, 12-23, fere 16-29 μ latis, longitudine media 21,70 μ, latitudine media 17,23 μ; oogoniis et oosporis ignotis. 3485

Hab. Erucastrum Pollichii Sch. — *Per. parasiticae* affinis.

49. **Peronospora Erysimi** E. Gäumann, Beih. Bot. Centralbl. XXXV, Abt. 1., 1918, p. 135. — *Per. parasitica* f. *Erysimi cheiranthoidis* Thüm. 1872, Fungi austr. 938, f. *Erys. repandi* Thüm. 1873, l. c. 1135. — Caespitulis densissimis, in caulibus et foliis expansis; conidiophoris fere plurimis (1-8) e stomatibus exeuntibus, 300-600 μ 3486

altis, furcis literae « sigma » similiter curvatis vel irregularibus ; conidiis longe ellipsoideis, 12-26, fere 19-22 µ longis, 11-21, fere 14-18 µ latis, longitudine media 20,18 µ, latitudine media 16,10 µ; oogoniis e tunica persistenti formatis, 35-44, fere 37-38 µ diam., oosporis globosis 29-32 µ diam.

Hab. Erysimum crepidifolium Reich., cheiranthoidem L., hieracifolium L. et repandum L.

50. **Peronospora Hesperidis** E. Gäumann, Beih. Bot. Centralbl. XXXV, Abt. 1., 1918, p. 135. — Caespitulis rarissimis, in tergo foliorum expansis; conidiophoris fere plurimis (1-6) e stomatibus exeuntibus, 200-250 µ altis, furcis 25-65 µ longis, literae « sigma » similiter curvatis ; conidiis magnis, 19-34, fere 24-28 µ longis, 17-28, fere 21-24 µ latis, longitudine media 26,41 µ, latitudine media 22,28 µ; oogoniis et oosporis ignotis. 3487

Hab. Hesperidem matronalem L.—*Per. parasiticae* affinis.

51. **Peronospora Isatidis** E. Gäumann, Beih. Bot. Centralbl. XXXV, Abt. 1., 1918, p. 136, fig. 22. — Caespitulis densis, in tergo foliorum expansis; conidiophoris singulis vel plurimis (1-4) e stomatibus exeuntibus, 200-250 µ altis, furcis literae « sigma » similiter curvatis vel irregularibus; conidiis ellipsoideis, 14-32, fere 21-26 µ longis, 11-24, fere 17-21 µ latis, longitudine media 22,45 µ, latitudine media 19,33 µ; oogoniis et oosporis ignotis. 3488

Hab. Isatidem tinctoriam L., Helvetia or. — *Per. parasiticae* affinis.

52. **Peronospora Lepidii sativi** E. Gäumann, Beih. Botan. Centralbl., XXXV, Abt. 1., 1918, p. 136.— Caespitulis densis, in foliis, caulibus et ramis expansis; conidiophoris singulis vel plurimis (1-6 fere 3-4) e stomatibus exeuntibus, 300-500 µ altis, furcis 15-70 µ longis, literae « sigma » similiter curvatis; conidiis late ellipsoideis, 16-28, fere 19-26 µ long. 16-24 fere 18-21 µ lat., long. media 22,34 µ, latitudine media 19,18 µ ; oogoniis e tunica persistenti formatis, 40-53, fere 46-50 µ diam., oosporis globosis, 29-41, fere 32-45 µ diam. 3489

Hab. Lepidium campestre (L.), Lep. Drabam L., Lep. latifolium L. (?), Lep. ruderale L. et Lep. sativum L., Europa, Amer. bor. — *Per. parasiticae* affinis.

53. **Peronospora Lepidii** (Mc Alp.) Wilson, Mycol. 1914, p. 198 t. 135 f. 1-10. — *Peronospora parasitica* var. *Lepidii* Mac Alp., Proc. Roy. Soc. Victoria, 1895, p. 221.—A *P. parasitica* et *P. Niessleana* dif- 3490

fert ramis primariis conidiophororum ascendentibus et non dense capitatis.

Hab. in foliis Lepidii virginici (America bor.), L. ruderali Australia, et probabiliter etiam in Europa.

54. **Peronospora Lepidii virginici** E. Gäumann, Beih. Bot. Centralbl. XXXV, Abt. 1., 1918, p. 136, fig. 23. — *Per. Lepidii* (Mc Alp.) Wilson 1914, p. 198 p. p. — Caespitulis densis, in tergo foliorum expansis: conidiophoris plurimis (7-9) coalitis, 200 µ altis, furcis literae « sigma » similiter curvatis, sed parte ultima rami longioris inflexis: conidiis longe ellipsoideis, 19-37, fere 24-30 µ longis, 14-24, fere 16-21 µ latis, longitudine media 27,52 µ, latitudine media 18,35 µ: oogoniis e tunica persistenti formatis, 40-52, fere 48 µ diam.; oosporis globosis, 25-42, fere 32 µ diam. 3491

Hab. Lepidium virginicum L. — *Peronosp. parasiticae* affinis.

55. **Peronospora Lunariae** E. Gäumann, Beih. Bot. Centralbl. XXXV, Abt. 1., 1918, p. 136, fig. 24. — Caespitulis raris, in tergo foliorum expansis: conidiophoris singulis vel plurimis stomatibus exeuntibus, 200-600 µ altis, furcis undulatis vel literae « sigma » similiter curvatis, sed parte ultima utrorum ramorum inflexis, 50-90 µ longis; conidiis magnis, 19-31, fere 24-27 µ longis, 16-21, fere 21-24 µ latis, longitudine media 25,85 µ, latitudine media 21,74 µ: oogoniis et tunica persistenti formatis, 40-75, fere 26-64 diam., oosporis globosis, 29-42, fere 32-35 µ diam. 3492

Hab. Lunariam annuam L. et redivivam L.—*Per. parasiticae* affinis.

56. **Peronospora Matthiolae** E. Gäumann, Beih. Bot. Centralbl. XXXV, Abt. 1., 1918, p. 137. — *Per. parasitica* f. *Matthiolae annuae* Roum. 1894, Fungi gall. 3137. — Caespitulis rarissimis, in tergo foliorum expansis: conidiophoris plurimis (3-5) coalitis, 300 µ altis, furcis fere 40-60 µ longis, literae « sigma » similiter curvatis; conidiis late ellipsoideis, 12-24, fere 16-22 µ longis, 9-21, fere 14-19 µ latis, longitudine media 18,93 µ, latitudine media 16,23 µ; oogoniis et oosporis ignotis. 3493

Hab. Matthiolam incanam R. Br. — Europa media.

57. **Peronospora Nasturtii aquatici** E. Gäumann, Beih. Bot. Centralbl. XXXV, Abt. 1., 1918, p. 138. — Caespitulis raris, in tergo foliorum expansis: conidiophoris plurimis e stomatibus exeuntibus, furcis irregularibus vel literae « sigma » similiter curvatis; conidiis late ellipsoideis 10-17, fere 11-14 µ longis, 8-13, fere 9-12 µ latis, 3494

longitudine media 20,32 μ, latitudine media 17,07 μ; oogoniis et oosporis ignotis.

Hab. Nasturtium aquaticum (L.) Beck.—*Peron. parasiticae* affinis.

58. **Peronospora Nasturtii montani** E. Gäumann. Beih. Bot. Centralbl. 3495
XXXV, Abt. 1., 1918, p. 138.— Caespitulis raris, in tergo foliorum expansis; conidiophoris singulis stomatibus exeuntibus 350-400 μ altis, truncis crassis (15 μ diam.), ramis undulatis, furcis literae « sigma » similiter curvatis; conidiis maximis, 19-36, fere 24-30 μ longis, 16-31, fere 21-27 μ latis, longitudine media 27,81 μ, latitudine media 24,16 μ; oogoniis et oosporis ignotis.

Hab. Nasturtium montanum Wal. — *Peron. parasiticae* affinis.

59. **Peronospora Nesleae** E. Gäumann, Beih. Bot. Centralbl. XXXV, 3496
Abt. 1., 1918, p. 137. — *Per. parasitica* Tul. f. *Nesliae* Thüm. 1872, Fungi austr. 650, Rabenh. Fungi europ. 794. — Caespitulis densissimis, in toto tergo foliorum expansis; conidiophoris singulis e stomatibus exeuntibus, gracilibus, 180-600 μ altis, furcis 30-60 μ longis, irregulariter vel literae « sigma » similiter curvatis, sed parte ultima longioris rami inflexis; conidiis late ellipsoideis, 12-24, fere 16-19 μ longis, 11-19, fere 14-17 μ latis, longitudine media 16,98 μ, latitudine media 15,65 μ; oogoniis e tunica persistenti formatis, frequentissimis in foliis veteribus, 32-49, fere 35-38 μ diam., oosporis globosis, 24-32, fere 27-29 μ diam.

Hab. Nesleam paniculatam (L.) Desv. — Europa med.

60. **Peronospora Roripae islandicae** E. Gäumann, Beih. Bot. Centralbl. 3497
XXXV, Abt. 1., 1918, p. 137 fig. 27. — *Per. Lepidii* (Mc Alp.) Wils. 1914, p.p. — Caespitulis densissimis, in tergo foliorum expansis; conidiophoris plurimis (3-6) e stomatibus exeuntibus 250-400 μ altis, furcis rectangulis, paene rectis, 10-40 μ longis; conidiis parvis, 11-23, fere 14-19 μ longis, 9-19, fere 13-16 μ latis, longitudine media 16,62 μ, latitudine media 13-79 μ; oogoniis et oosporis ignotis.

Hab. Roripam islandicam (Meder) Schinz et Thellung et R. silvestrem (L.) Besser. — *Per. parasiticae* affinis.

61. **Peronospora Sisymbrii officinalis** E. Gäumann, Beih. Bot. Centralbl. 3498
XXXV, Abt. 1., 1918, p. 139, fig. 34.— Syn. *P. parasitica* f. *Sisymbrii* Schneid. 1864, Winter 1871, in herb.—Caespitulis densis, in siliquis et in tergo foliorum expansis; conidiophoris plurimis (4-6) e stomatibus exeuntibus, 250-400 μ longis, furcis literae « sigma »

similiter curvatis, sed parte ultima rami longioris fere inflexis; conidiis late ellipsoideis 12,28, fere 18-24 µ longis, 11-26, fere 16-21 µ latis, longitudine media 20,80 µ, latitudine media 17-76 µ; oogoniis e tunica persistenti formatis, 40-53, fere 41-50 µ diam.; oosporis globosis, 27-34, fere 29-32 µ diam.

Hab. Sisymbrium Irio L., Sis. officinale (L.) Scop. et Sis. pannonicum Jacq., Europa et America bor.

62. **Peronospora Sophiae pinnatae** E. Gäumann, Beih. Bot. Centralbl. XXXV, Abt. 1., 1918, p. 139. — Caespitulis densissimis, in caulibus, inflorescentiis et in tergo foliorum expansis; conidiophoris plurimis (3-8) e stomatibus exeuntibus, gracilibus, 450-650 µ altis, furcis brevibus, literae « sigma » similiter curvatis; conidiis late ellipsoideis, 12-26, fere 18-22 µ longis, 11-24, fere 16-21 µ latis, longitudine media 19,95 µ, latitudine media 18-19 µ; oogoniis et oosporis ignotis. 3499

Hab. Sisymbrium incisum Engelm. et Sophiam pinnatam Howell. — *Per. parasiticae* affinis.

63. **Peronospora Sisymbrii Sophiae** E. Gäumann, Beih. Bot. Centralbl. XXXV, Abt. 1., 1918, p. 139. — Caespitulis raris, in tergo foliorum expansis; conidiophoris singulis vel plurimis (1-4) e stomatibus exeuntibus, 200-250 µ altis, furcis inaequalibus, fere 20 µ longis, forcipi vel literae « sigma » similiter curvatis; conidiis longe ellipsoideis, 19-34, fere 24-30 µ longis, 12-26, fere 18-22 µ latis, longitudine media 27,05 µ, latitudine media 19,81 µ; oogoniis e tunica persistente formatis, 43-55, fere 49-52 µ diam., oosporis globosis, 33-35 µ diam. 3500

Hab. Sisymbrium Sophiam L. et fortasse S. canescentem Nutt. — *Per. parasiticae* affinis.

64. **Peronospora Sisymbrii orientalis** E. Gäumann, Beih. Bot. Centralbl. XXXV, Abt. 1., 1918, p. 139, fig. 35. — Caespitulis densis, in tergo foliorum expansis; conidiophoris singulis vel binis e stomatibus exeuntibus, 300-350 µ altis, furcis 20-70 µ longis, literae « sigma » similiter curvatis; conidiis ellipsoideis, 16-27, fere 22-26 µ longis, 14-26, fere 19-22 µ latis, longitudine media 23,17 µ, latitudine media 20,49 µ; oogoniis et oosporis ignotis. 3501

Hab. Sisymbrium orientale L. — *Per. parasiticae* affinis.

65. **Peronospora Sisymbrii Loeselii** E. Gäumann, Beih. Bot. Centralbl. XXXV, Abt. 1., 1918, p. 138. — Caespitulis rarissimis, in tergo foliorum expansis; conidiophoris singulis vel plurimis stomatibus exeuntibus, 200-250 µ altis, furcis 15-50 µ longis, literae « sigma » 3502

similiter curvatis vel irregularibus, conidiis fere globosis, 12-24, fere 16-21 µ longis, 11-21, fere 14-19 µ latis, longitudine media 18,83 µ, latitudine media 16,51 µ; oogoniis et oosporis ignotis.

Hab. Sisymbrium Loeselii L. — *Per. parasiticae* affinis.

66. **Peronospora Sisymbrii intermedii** E. Gäumann, Beih. Bot. Centralbl. 3503
XXXV, Akt. 1., 1918, p. 138, fig. 33. — Caespitulis raris in caulibus et inflorescentiis expansis; conidiophoris plurimis (3-5) coalitis, 200-400 fere 300 µ altis, furcis parvissimis, 10-15 µ longis, fere literae « sigma » similiter curvatis, saepe una ex parte nascentibus; conidiis ellipsoideis, 16-29, fere 21-26 µ longis, 12-23, fere 16-21 µ latis, longitudine media 22,82 µ, latitudine media 18,38 µ, oogoniis et oosporis ignotis.

Hab. Sophiam intermediam. — *Per. parasiticae* affinis.

67. **Peronospora Teesdaleæ** E. Gäumann, Beih. Bot. Centralbl. XXXV, 3504
Abt. 1., 1918, p. 140 — Caespitulis raris, in tergo foliorum expansis; conidiophoris singulis e stomatibus exeuntibus, fere 300-400 µ altis, furcis literae « sigma » similiter curvatis, sed parte ultima rami longioris inflexis; conidiis late ellipsoideis, 11-17, fere 12-15 µ longis, 9-14, fere 11-13 µ latis, longitudine media 21,25 µ, latitudine media 28,62 µ. Oogoniis et oosporis ignotis.

Hab. Teesdaleam nudicaulem (L.) R. Br.—*Per. parasiticae* affinis.

68. **Peronospora Thlaspeos alpestris** F. Gäumann, Beih. Bot. Centralbl. 3505
XXXV, Abt. 1., 1918, p. 140, fig. 40. — Caespitulis raris, in tergo foliorum expansis; conidiophoris singulis e stomatibus exeuntibus, parvis, 120-250 µ altis, ramis undulatis, furcis literae « sigma » similiter curvatis, conidiis ellipsoideis, 13-27, fere 19-24 µ longis, 12-23, fere 16-19 µ latis, longitudine media 20,81 µ, latitudine media 18,13 µ; oogoniis et oosporis ignotis.

Hab. in Thlaspi alpestre L. — *Per. parasiticae* affinis.

69. **Peronospora Thlaspeos arvensis** E. Gäumann, Beih. Bot. Centralbl. 3506
XXXV, 1918, Abt. 1., p. 140. — Syn. *Per. parasitica* f. *Thlaspeos arvensis* Thüm. 1873, Fungi austr. 936, Mycoth. univers. 1874 p. 48. — Caespitulis raris, in caulibus, siliquis et in tergo foliorum expansis; conidiophoris singulis vel plurimis e stomatibus exeuntibus, 250-400, fere 300 µ altis, ramis undulatis, furcis literae « sigma » similiter curvatis vel variabilibus; conidiis late ellipsoideis, mutabilibus, 17-32, fere 24-29 µ longis, 14-26, fere 18-22 µ latis, longitudine media 25,45 µ, latitudine media 20,13 µ; oogoniis e tunica persistenti formatis, 54-59 µ diam., oosporis globosis, 35-37 µ diam.

Hab. in Thlaspi arvense L.

70. **Peronospora Thlaspeos perfoliati** E. Gäumann, Beih. Bot. Centralbl. XXXV, Abt. 1., 1918, p. 140. — Syn. *Per. parasitica* f. *Thlaspeos perfoliati* Thüm. 1872, Fungi austr. 407. — Caespitulis densis, in caulibus et in tergo foliorum expansis; conidiophoris plurimis (6-8) e stomatibus exeuntibus, 250-300 μ altis, furcis 15-80 μ longis, literae « sigma » similiter curvatis; conidiis late ellipsoideis, 12-27, fere 16-21 μ longis 11-19, fere 16-18 μ latis, longitudine media 18,84 μ, latitudine media 16,34 μ: oogoniis e tunica persistenti formatis, frequentissimis in foliis veteribus, fere 43-48 μ diam.; oosporis globosis, 30-34 μ diam. 3507

Hab. in Thlaspi perfoliato L.

71. **Peronospora Turritidis** E. Gäumann, Beih. Bot. Centralbl. XXXV, Abt. 1., 1918, p. 141, fig. 43. — Caespitulis raris, in tergo foliorum expansis; conidiophoris singulis vel plurimis e stomatibus exeuntibus, 250-300 μ altis, furcis literae « sigma » similiter curvatis vel irregularibus; conidiis late ellipsoideis, 12-24, fere 16-21 μ longis, 11-21, fere 14-18 μ latis, longitudine media 18,94 μ, latitudine media 16,37 μ; oogoniis et oosporis ignotis. 3508

Hab. Turritidem glabram L. — *Per. parasiticae* affinis.

72. **Peronospora Cephalariae** F. Vincens, Bull. Soc. Mycol. Fr. 1913, p. 174, t. VI. — Plagulis densis pallide griseo-violaceis; conidiophoris 3-5 gregariis, 250-300 × 7-8, basi subinflatis, supra 4-6 ramosis; ramulis inferioribus et mediis plus v. minus flexuosis, suberectis, extimis inaequalibus, patentibus, rectis v. curvatis; conidiis ovoideis 25-30 × 15-20, infra leniter apiculatis, sordide violaceis; oosporis 30-35 μ diam. episporio obscuro verrucoso praeditis. 3509

Hab. in foliis Cephalariae leucanthae, raro C. alpinae et C. transylvanicae, in Horto botanico Toulouse, Gallia.— *Per. Dipsaci* affinis.

73. **Peronospora Chamaesycis** Wilson, Mycologia 1914, p. 204, t. 135 f. 11-13. — Maculis epiphyllis decoloratis, griseo-v. dilute-aureis; conidiophoris hypophyllis dense caespitosis 1-3 e stomatibus erumpentibus, 200-450 × 6-10, 6-9-ies ramosis, ramis elongatis, gracilibus, flaccidis, incurvatis, flexuosis, ultimis subaequalibus, axialibus longioribus parum subulatis, angustis, rectis, 5-8 × 2-4; conidiis globosis v. ovoideis, 20-28 × 12-20, violaceis; oogoniis tenuiter tunicatis, flavidis; oosporis 30-40 μ cr., flavo-brunneis, episporio leviusculo v. plus minus ruguloso. 3510

Hab. in foliis Euphorbiae (e Sect. Anisophylli) serpen-

tis, maculatae, stictosporae, humistratae, glyptosporae, in America boreali. — Cnfr. n. 76.

74. **Peronospora Esulae** E. Gäumann, Ann. Cons. et Jard. Bot. Genève, v. XXI, 1919, p. 11, fig. 2. — Caespitulis mollibus, griseo-brunneis, tergum foliorum nonnulla parte subtegentibus; conidiophoris singulis vel plurimis e stomatibus exeuntibus, 300-550 μ altis, trunco $^1/_2$-$^3/_4$ totius altitudinis efficienti, 8-11 μ crasso, ramis 3-7 ies dichotome ramosis, leviter curvatis; furcis terminalibus brevibus, rectangulis, paene rectis; conidiis leviter flavis, 12-31, fere 19-24 μ longis, 8-23, fere 12-18 μ latis. Longitudine media 22-21 μ, latitudine media 15,62 μ. Oosporis ignotis. 3511

Hab. in foliis vivis Euphorbiae Esulae L., Europa media. 3512

75. **Peronospora valesiaca** E. Gäumann, Ann. Cons. et Jard. Bot. Genève, v. XXI, 1919, p. 9; Mitt. Naturf. Ges. Bern, 1919 [1920], p. 178, fig. 2. — Caespitulis mollibus, griseo-brunneis, totum tergum foliorum subtegentibus; conidiophoris singulis vel plurimis (1-4) e stomatibus exeuntibus, 300-400 μ altis, trunco $^1/_2$-$^3/_4$ totius altitudinis efficienti, 5-9 μ crasso; ramis 5-8 ies dichotome ramosis, leviter flexuosis, furcis terminalibus rectangulis, ramis utribus vel longitudine aequali vel uno paullo longiore, fere litterae sigma similiter curvatis. Conidiis leniter brunneis 14-32, fere 21-24 μ longis, 12-28, fere 18-21 μ latis; longitudine media 22,30 μ, latitudine media 19,68 μ. Oosporis ignotis.

Hab. in foliis vivis Euphorbiae Gerardianae, Wallis Helvetia.

76. **Peronospora Euphorbiae glyptospermae** E. Gäumann, Ann. Cons. et Jard. bot. Genève, v. XXI, 1919, p. 10, fig. 1. — Syn. *Per. Chamaesycis* Wils., Mycologia VI, 1914, p. 204 p. p.— Caespitulis mollissimis, griseo-brunneis, difficile visibilibus, totum tergum foliorum subtegentibus; conidiophoris fere singulis (1-3) e stomatibus exeuntibus, 150-300 μ altis, trunco $^1/_2$-$^3/_4$ totius altitudinis efficienti, gracili, 4-7 μ crasso; ramis 3-5 ies dichotome ramosis, leviter curvatis; furcis terminalibus brevissimis, 4-20 μ longis, rectangulis, rectis vel leniter curvatis; conidiis leviter flavo-brunneis, ellipsoideis, 17-34, fere 24-29 μ longis, 8-23, fere 14-19 μ latis. Longitudine media 26,27 μ, latitudine media 16,74 μ. Oosporis ignotis. 3513

Hab. in foliis vivis Euphorbiae glyptospermae Engelm., Nebraska, Amer. bor.—Vide supra n. 73.

77. **Peronospora stigmaticola** Raunkiær, Botanisk Tidsskrift, XVIII p. 108 (1892-93), Lind-Rost., Fungi Dan. p. 69. — Hyphis conidio- 3514

phoris erectis, sparsis vel fasciculatis sordide et dilute violascentibus, usque ad 0,5 mm. altis, c. 8-15 μ crassis, apice inaequaliter 4-7 ies dichotomis; ramis sensim attenuatis, patentibus vel divaricatis, ultimis conoideo-subulatis, rectis vel leviter curvatis, 6-12 μ longis; conidiis ellipsoideis, 30-50 μ longis, 10-15 μ latis, obtusiusculis, sordide et dilute violascentibus; oogoniis sphaeroideo-ovoideis, 35-55 μ diam.; oosporis sphaeroideis 25-35 μ diam., episporio laete flavido-fusco praeditis. Canalis stigmaticus praesertim plantae nutricis oosporis repletus.

Hab. in floribus, praecipue stigmatibus et filamentis Menthae arvensis et aquaticae, in Dania (Iylland) et Scania.

78. **Peronospora Senneniana** Fragoso et Sacc. in Sacc., Notae mycol. XXII, 1917 (Acc. Pad.) p. 158. — Media inter *Peron. Trifoliorum* et *Peron. Viciae;* hyphis, ramis ramulisque *Peron. Viciae;* conidiis vero oblongo-ellipsoideis, utrinque leviter obtuseque acutatis, multo amplioribus, nempe 35-38 × 16-19, sordide diluteque olivaceis, intus nubilosis; caespitulis effusis, hypophyllis, dilute olivaceo-griseis. 3515

Hab. in foliis languidis Lathyri (Orobi) nigri, Planes in Pyrenaeis, alt. 1450 m., ubi legit egr. Sennen., Martio 1916 et communicavit cl. G. Fragoso. — Forma, magnitudine coloreque conidiorum distincta species videtur.

79. **Peronospora Phacae** E. Gäumann, Mitt. Naturf. Ges. Bern, 1919 [1920], p. 178. 3516

Hab. in Phaca frigida, in Alpibus Helvetiae.

80. **Peronospora Oxytropidis** E. Gäumann, l. c. 3517

Hab. in Oxytropide campestri, Albula Helvetia.

81. **Peronospora Trifolii alpestris** E. Gäumann, l. c. p. 182. 3518

Hab. in Trifolio alpestre, Helvetia, Germania bor., Dania.

82. **Peronospora Trifoliorum** De By. — var. **manshurica** Naoumoff, Bull. Soc. Mycol. Fr. 1914 p. 73, t. I f. 2. — Conidiophoris altioribus 240-900 × 7-9, conidiis fere globosis vel late ellipsoideis, 21-27 × 18-24, oosporis maioribus 36-48 μ diam. 3519

Hab. in foliis vivis Glycines hispidae, prov. Austro-Ussuriensi (Rossiae Orient.).

83. **Peronospora narbonensis** E. Gäumann, Mitt. Naturf. Ges. Bern. 1919 [1920], p. 179. 3520

Hab. in Vicia narbonensi, Emilia, Italia bor.

4. **Peronospora Viciae sativae** E. Gäumann, Mitt. Naturf. Ges. Bern, 1919 [1920], p. 184. 3521

Hab. in Vicia sativa, Europa, America bor., Asia.

85. **Peronospora Harioti** E. Gäumann, Bull. Soc. neuchâtel. Sc. Nat. 3522
t. XLIII, 1919, Extr. p. 4, fig. 1-2. — Caespitulis densis, brunneo-violaceis, tergum foliorum nonnulla parte subtegentibus; conidiophoris singulis vel plurimis (1-14) e stomatibus exeuntibus, 180-350 μ altis, gracilibus, trunco 0,5-$^{2}/_{3}$ totius altitudinis efficienti, 6-10 μ crasso, basi saepe leviter tumida; ramis 3-6 ies dichotome ramosis, leviter curvatis; furcis terminalibus rectangulis, 10-25 μ longis, fere leviter curvatis; conidiis late ellipsoideis vel paene globosis, leniter flavis, 16-31, fere 21-26 μ longis, 14-27, fere 18-23 μ latis. Longitudine media 23,14 μ, latitudine media 20,74 μ. Oosporis ignotis.

Hab. in foliis vivis Buddleiae globosae Hope, in Gallia centrali. — *Per. sordidae* proxima sed caracteribus conidiorum diversa.

86. **Peronospora americana** E. Gäumann, Ann. Cons. et Jard. Bot. 3523
Genève, v. XXI, 1919, p. 21, fig. 5. — Caespitulis mollibus, brunneo-violaceis, tergum foliorum nonnulla parte subtegentibus; conidiophoris singulis vel plurimis (1-9) e stomatibus exeuntibus, 250-600 μ altis, trunco 0,5-$^{2}/_{3}$ totius altitudinis efficienti, 8-13 μ crasso; 4-8 ies dichotome ramosis, furcis terminalibus 10-25 μ longis, rectangulis, leviter curvatis; conidiis leviter brunneis, longe ellipsoideis, 24-43, fere 33-38 μ longis, 12-28, fere 16-22 μ latis. Longitudine media 34,43 μ, latitudine media 19,14 μ. Oosporis singulis in foliis marcidis, 19-43 μ diam., episporio flavo, crasso, valde sed irregulariter rugoso Nebraska, Amer. bor.

Hab. in foliis vivis Polygoni ramosissimi Michx., Nebraska, Amer. bor.

87. **Peronospora Jaapiana** P. Magn., Ber deutsch. bot. Ges. XXVIII 3524
Bd., 1910, p. 250, tab. VII. — Hyphis 225,55-329,93 μ long., ramulis supra medio pluries dichotomice divisis, apice angustatis superioribus brevibus acutis, patentibus; conidiis ovoideis utrinque rotundatis epapillatis e violaceo flavidis, 25-34 × 16,5-18.

Hab. in foliis Rhei rhapontici, Trignitz (Priegnitz), Germania (O. Jaap). — *Per. Rumicis* affinis.

88. **Peronospora Agrorum** E. Gäumann, Mitt. Naturf. Ges. Bern. 1919 3525
[1920], p. 179.

Hab. in Ańdrosace septentrionali, Suecia.

89. **Peronospora alpicola** E. Gäumann, Mitt. Naturf. Ges. Bern, 1919 3526
[1920], p. 182.

Hab. in Ranunculo aconitifolio, pyrenaeo, Seguieri, in Alpibus Helvetiae, Vogesen, Schwarzwald, Tirolia.

90. **Peronospora hiemalis** E. Gäumann, l. c. p. 183. 3527

Hab. in Ranunculo acri, Europa, America bor., Asia occ.

91. **Peronospora Ranunculi** E. Gäumann, l. c. p. 183. 3528

Hab. in Ranunculo repenti, Europa, America bor.

92. **Peronospora apiospora** Poirault, Bull. Assoc. Nat. de Nice, 1915 p. 8 (extr.). — Maculis amplis griseo-violaceis; conidiophoris sparsis, albis, elatis, hypha primaria e basi leviter dilatata cylindrica, 7 μ cr., parce ramosa; ramis elongatis, leviter curvulis, apice conidigeris; conidiis longe piriformibus 46-48 × 26; oosporis ignotis. 3529

Hab. in foliis Ranunculi graminei, Caussols, Alp. Marit. — Diversa a *Per. Ficariae* et *Per. pygmaea*, Ranunculacearum incolis.

93. **Peronospora Aparines** (De Bary) E. Gäumann, Svensk Bot. Tidskr., Bd. 12., 1918, p. 444, *Peronospora calotheca* De B. γ *Aparines* De By., Ann. Sc. Nat. Bot. (1863) p. 112. — Caespitulis densis, griseis, totum tergum foliorum tegentibus; conidiophoris singulis vel binis e stomatibus exeuntibus, 250-750 μ altis; trunco $^1/_3$-$^4/_5$ totius altitudinis efficienti, 9-14 μ crasso, basi leniter tumida; parte summa arboris 4-7 ies dichotome ramosa, ramis plus minus rectis; furcis terminalibus rectangulis, leviter curvatis, ramulis utrisque fere aequilongis (6-21 μ); conidiis late ellipsoideis, fulvo-violaceis, 22-38, fere 29-34 μ longis, 17-29, fere 21-25 μ latis; longitudine media 31,18 μ latitudine media 22,66 μ. Oosporis globosis, flavis, 27-43 μ diam., episporio dense reticulato. 3530

Hab. in foliis Galii Aparines L., Europa media et bor.

94. **Peronospora borealis** E. Gäumann, Svensk Bot. Tidskr. Bd. 12., 1918, p. 444; Mitt. Naturf. Ges. Bern, 1919 [1920], p. 178. — Syn. *Per. calotheca* Auct. — Caespitulis mollibus, griseis, tergum foliorum nonnulla parte tegentibus; conidiophoris singulis vel binis e stomatibus exeuntibus, 250-450 μ altis, trunco $^1/_3$-$^2/_3$ totius altitudinis efficienti, 6-9 μ crasso, basi leviter tumida; parte summa arboris 4-6 ies dichotome ramosa, ramis plus minus rectis; furcis terminalibus rectangulis, leviter curvatis, ramulis utrisque longitudine fere aequali (7-14 μ); conidiis ellipsoideis, fulvo-violaceis, 21-34, fere 25-29 μ longis, 11-23, fere 15-20 μ latis; longitudine media 27,33 μ latitudine media 17,31 μ. Oosporis ignotis. 3531

Hab. in foliis Galii borealis L., Europa bor., America bor.

95. **Peronospora insubrica** E. Gäumann, Mitt. Naturf. Ges. Bern, 1919 3532

[1920], p. 178.

Hab. in Galio purpureo, in Cant. Ticino, Helvetiæ.

96. **Peronospora silvatica** E. Gäumann, Svensk Bot. Tidskr. Bd. 12., 1918, p. 445. — Syn. *Per. calotheca* Auct. — Caespitulis mollibus, griseis, tergum foliorum nonnulla parte tegentibus; conidiophoris vel singulis vel trinis e stomatibus exeuntibus, 200-350 µ altis; trunco $^2/_3$ totius altitudinis efficienti, 8-14 µ crasso, basi leviter tumida, parte summa arboris 4-8 ies dichotome ramosa, ramis plus minus rectis; furcis terminalibus rectangulis, leviter curvatis, ramulis utrisque fere aequilongis (5-12 µ); conidiis paullum violaceis, saepe minutissime papillatis, late ellipsoideis, 14-31, fere 20-25 µ longis, 9-24, fere 15-19 µ latis; longitudine media 22,72 µ, latitudine media 17,26 µ. Oosporis ignotis. 3533

Hab. folia Galii silvatici L., Europa media et bor.

97. **Peronospora Galii veri** E. Gäumann, Svensk Bot. Tidsks., Bd. 12., 1918, p. 144. — Syn. *Per. calotheca* Auct. — Caespitulis griseis, densis, totum tergum foliorum tegentibus; conidiophoris singulis vel plurimis (1-14), e stomatibus exeuntibus, fere 400-550 µ altis, trunco $^3/_4$ totius altitudinis efficienti, 7-9 µ crasso, basi leviter tumida; parte summa arboris 6-8 ies dichotome ramosa, ramis plus minus rectis; furcis terminalibus rectangulis, rectis vel leviter curvatis, ramulis utrisque fere aequilongis (6-12 µ); conidiis ellipsoideis, fulvis, 19-34, fere 27-31 µ longis, 11-23, fere 16-19 µ latis; longitudine media 27,12 µ, latitudine media 17,75 µ. Oosporis ignotis. 3534

Hab. folia caulesque Galii veri L., Europa media et bor.

98. **Peronospora minima** Wilson, Mycologia 1914, p. 209, t. 136, f. 18-22. — Hypophylla; conidiophoris late effusis, caespitosis, griseis, maculis epiphyllis decoloratis; conidiophoris rectis v. flexuosis, 2-10 fasciculatis, brevibus, pauci ramosis, 150-300 × 8-10, 1-3 v. 4 ies ramosis, ramis rectis, ultimis conoideis, 15-20 × 4-6, v. conidiophoris minimis cum 3-4 conidiis; conidiis globosis, dilute aureo-brunneis, 28-32 µ; oosporis aureis subglobosis, 65-80 µ diam., episporio ruguloso. 3535

Hab. in foliis Saxifragae cernuae, Tromsö Norvegia (G. Lagerheim).

99. **Peronospora indica** Sydow, Ann. Mycol. 18., 1920, p. 157, cum icone. — Caespitibus laxis, albidis; conidiophoris singulis vel paucis erumpentibus, 359-500 µ altis, basi 5 $^1/_2$-7 µ latis, pluries dichotome ramosis; ramis primariis oblique erectis, paenultimis plerumque 3536

valde undulato-curvatis, ultimis saepius inaequalibus rectis vel parum curvatis; conidiis subglobosis vel obovatis, 23-30 × 16-24; oosporis immaturis tantum visis, brunneolis, 30-34 μ diam.

Hab. in foliis Calceolariae scabiosifoliae, Dehra Dun, Indiae or. (E. J. Butler).

100. **Peronospora Celsiae** H. et P. Syd. in Syd. et Butl., Ann. Mycol. X, 1912, p. 245. — Caespitulis densiusculis, primitus albidis, dein pallide griseis v. griseo-violaceis; hyphis conidiophoris plerumque pluribus erumpentibus, 300-600 μ alt. basi μ 7-10 μ cr.; ramis 4-7 ies dichotome partitis, ascendentibus, penultimis valde curvatis; ramulis ultimis plerumque leviter curvatis aut omnibus aequilongis aut uno plus minusve breviore; conidiis late ellipsoideis, obtusis, quoad formam et magnitudinem vix variabilibus, 17-21 × 15-17, pallidissime violaceis; oosporis nondum visis. 3537

Hab. in foliis Celsiae coromandelianae, Pusa Indiae or. (E. J. Butler). — *P. Linariae* videtur proxima.

101. **Peronospora Pedicularis** Björn Palm, in Svensk Bot. Tidskr., Bd. 5., 1911, p. 356. — Conidiophoris 270-325 μ alt. ad 10,5 μ crass. basi tumido-inflatis, saepe 14-16 μ; ramis 4-6 ies dichotome partitis, angulatim divergentibus, ramulis ultimis leviter recurvatis; conidiis maximis, latis, obtuse ovatis 26,5-34 μ long. 18,5-22,5 crass., membrana pallide violacea, contentu flavidulo. Oosporis maturis non visis, junioribus autem in parenchymate folii copiosissime observatis. 3538

Hab. in Pediculari lapponica, Lapponiae Tornensis in locis Albisko Björkliden, Vaggejokk, Scandinavia.

102. **Peronospora verna** E. Gäumann, Ann. Mycol. 16., 1918, p. 198, fig. 1 c. — Differt a *Peronospora agresti* conidiis maioribus, 10-27, fere 19-22 μ longis, 8-23, fere 16-20 μ latis. Longitudine media 20,90 μ latitudine media 17,76 μ. 3539

Hab. in foliis vivis Veronicae serpyllifoliae L., Stockholm Suecia. — *Peronosporae* formae in foliis vivis Veronicae arvensis L., V. Chamaedrys L., V. praecocis All., V. prostratae L., V. teucrii L., V. Tournefortii Gmel. nec non V. vernae L., huc pertinere videntur.

103. **Peronospora saxatilis** E. Gäumann, Ann. Mycol. 16., 1918, p. 198, fig. 1 b. — Differt a *Peronospora agresti* conidiis maioribus, 19-40, fere 28-32 μ longis, 12-29, fere 19-23 μ latis; longitudine media 30,75 μ, latitudine media 21,63 μ. 3540

Hab. in foliis vivis Veronicae fruticantis, Waadt-

länderalpen Helvetia.

104. **Peronospora aquatica** E. Gäumann, Ann. Mycol. 16., 1918, p. 149.— 3541
Differt a *Peronospora agresti* conidiis maioribus 24-43, fere 33-38 µ longis, 9-27, fere 20-23 µ latis. Longitudine media 35-26 µ, latitudine media 21,02 µ.

Hab. in Veronica Anagallide, Europa, America bor.

105. **Peronospora grisea** (Unger 1847) De B.—Syll. VII, P. I p. 255— 3542
Secundum E. Gäumann (Ann. Mycol. 16., 1918, p. 189) species Ungeriana in Veronica Beccabunga tantum viget, cum conidiis, 23,65 × 16,10, in aliis gen. Veronicae speciebus novam speciem *Per. agrestis* cum subspeciebus pluribus extat.

106. **Peronospora arvensis** E. Gäumann, Ann. Mycol. 16., 1918, p. 198.— 3543
Differt a *Peronospora agresti* conidiis maioribus, 14-34, fere 22-26 µ longis, 11-31, fere 19-23 µ latis, longitudine media 24,67 µ, latitudine media 21,28 µ.

Hab. in foliis vivis Veronicae hederifoliae L. — *Peronosporae* forma in foliis vivis V. triphyllae huc pertinere videtur, Altenburg Hungaria (Linhart, Fungi hung. 488).

107. **Peronospora silvestris** E. Gäumann, Ann. Mycol. 16., 1918, 3544
p. 199.— Differt a *Peronospora agresti* conidiis maioribus, 22-39, fere 28-34 µ longis, 10-26, fere 18-22 µ latis. Longitudine media 31,74 µ, latitudine media 49,94 µ.

Hab. in foliis vivis Veronicae officinalis L., Marienspring prope Cladow Germania (P. Sydow, Myc. March. 2969).— *Peronosporae* forma in foliis vivis V. urticifoliae Jacq. forsan huc pertinet.

108. **Peronospora agrestis** E. Gäumann, Ann. Mycol. 16., 1918, p. 198.— 3545
Caespitulis mollibus, griseo-violaceis, totum tergum foliorum tegentibus; conidiophoris singulis vel plurimis e stomatibus emergentibus, 200-600 µ altis, 4-8-ies dichotome ramosis; trunco $^1/_2$-$^2/_3$ totius altitudinis efficienti, 5-9 µ crasso, basi leviter tumida; ramis leviter curvatis vel undulatis; furcis terminalibus rectangulis, fere literae graecae sigma similiter curvatis vel ramis utribus paene rectis, 8-20 µ longis; conidiis ellipsoideis, leviter griseo-violaceis, 9-26, fere 17-20 µ longis, 8-23, fere 15-18 µ latis. Longitudine media 19,07 µ, latitudine media 15,24 µ. Oosporis 36-57 µ diam., episporio crasso, flavo, levi vel paullo reticulato.

Hab. in foliis vivis Veronicae politae Fries, Helvetia. Fungus in foliis vivis Veronicae agrestis L. huc pertinere videtur.

109. **Peronospora palustris** E. Gäumann, Ann. Mycol. 16., 1918, p. 198, fig. 1 a. — Differt a *Peronospora agresti* conidiis maioribus, 20-36, fere 26-39 μ longis, 10-27, fere 17-20 μ latis. Longitudine media 27,46 μ latitudine media 18,66 μ. 3546

Hab. in foliis vivis Veronicae scutellatae L., Svendberg Suecia.

Species gen. *Peronosporae* secundum ordinem alphabeticum Familiarum et matricarum dispositae:

Berraginaceae 1, Campanulaceae 2, Caryophyllaceae 3-6, Chenopodiaceae 7-17, Compositae 18-19, Cruciferae 20-71, Dipsacaceae 72, Euphorbiaceae 73-76, Labiatae 77, Leguminosae 78-84, Loganiaceae 85, Polygonaceae 86-87, Primulaceae 88, Ranunculaceae 89-92, Rubiaceae 93-97, Saxifragaceae 98, Scrophulariaceae 99-109.

BREMIA Regel. — Syll. VII p. 243.

1. **Bremia ovata** K. Sawada, Botan. Magazin Tokyo, 1914, p. 83, cum icon.; Mycologia 1919, p. 85. — Hyphis 7 μ cr.; conidiophoris caespitosis, usque 1 mm. long. 3-8-ies ramosis, plerumque 7-8 septatis, ramulis brevibus, terminalibus sphaeroideo-v. capitato-incrassatis, 3-7 sterigmatibus praeditis; sterigmis 6-8 μ long.; conidiis ovoideis v. oblongo-ovoideis, infra minute pedicellatis, papilla apicali obsoleta, 14-18 × 10-13, hyalinis, granulatis. 3547

Hab. in Crepide japonica, Taiwan, Formosa, Japonica.

2. **Bremia Saussureae** K. Sawada, Botan. Mag. Tokyo, 1914, p. 80, cum icon.; Mycologia 1919, p. 85. — Maculis foliicolis pallide flavidis, polygoniis, 15 mm. circa latis, caespitulis hypophyllis densis albidis insidentibus; hyphis intercellularibus granulatis in mesophyllo diffusis 8-17 μ cr.; haustoriis ovoideis, obovoideis v. irregularibus 14-27 × 5-14; conidiophoris singulis v. caespitosis, elongatis usque mm. 1,021, 3-6-ies ramosis, ramulis omnibus brevibus obtusis, plerumque 5-6 septatis, terminalibus incrassatis, sterigmatibus 4-6 praeditis, 6-10 × 3; conidiis e late ellipsoideis elongato-oblongis, supra depresse papillatis, infra pedicellatis, granulatis, 24-57 × 18-28, hyalinis. 3548

Hab. in foliis Hemisteptae carthamoidis (= Saussureae affinis), Taiwan, Formosa, Japonia.

3. **Bremia Sonchi** K. Sawada, Botan. Magazin Tokyo, 1914, p. 80, cum icon.; Mycologia 1919, p. 84. — Maculis foliicolis v. caulicolis, parvis, polygoniis, raro totum folium tegentibus; hyphis super- 3549

ficialibus, sparsis arachnoideis, intercellularibus hyalinis, minute granulatis 8-17 μ cr., haustoriis sphaeroideis, quandoque obovoideis v. subclavatis, 11-24 × 7-13, conidiophoris caespitosis 230-560 μ long. supra medium 3-6-ies ramosis, infra parum inflatis, ramis angustis curvis, ramulis terminalibus apice sphaeroideis, 2-6 sterigmatibus praeditis, sterigmatibus 4-7 × 2,5-3; conidiis plerumque globosis raro ovoideis, supra depresse papillatis, infra anguste pedicellatis, contentu protoplasmico lucem refrangenti, 17-24 × 13-21.

Hab. in foliis caulibusque Sonchi oleracei, Formosa Japonia. — *Br. Lactucae* proxima *) sed ramulorum situ et magnitudine, apicis ramulorum forma satis diversa.

4. **Bremia graminicola** Naoumoff, Bull. Soc. Mycol. Fr. 1913, p. 274, 3550
t. XIII f. 1-3. — Maculis primo lutescentibus dein fuscis, subinde etiam totum folium occupantibus; caespitulis floccosis, albidis, dein griseis, conidiophoris hypophyllis, rarius epiphyllis, usque ad 600 μ alt. 9-10 μ diam., inferne in bulbo globoso inflatis, superne 5-6-ies dichotomis, ramis rigidis alterne ultro citroque curvatis, ramulis ultimis in vesiculam inflatis, papillas 4 insidentibus. Conidiis fere globosis, uno apice quandoque leniter acuminatis, hyalinis, 12 μ diam. — Oosporis nondum cognitis.

Hab. in foliis vivis Arthraxonis ciliaris in prov. Austro-Ussuriensi Rossiae orient. (Naoumoff) et in China (Miyake, in Bot. Mag. Tokyo, 1914).

BREMIELLA G. W. Wilson, Mycologia 1914, p. 195. — Hyphae fertiles solitariae v. fasciculatae e stomatibus erumpentibus, dichotome-v. pseudomonopodio-ramosae; ramuli terminales longi, apice in vesiculam apophysatam abientes; conidia hyalina, pyriformia, apice papillata, per zoosporas evacuantia; oosporae subrugosae.

1. Huc pertinet *Peronospora megasperma* Berlese et tunc *Bremiella* 3551
megasperma (A. Berl.) G. W. Wilson vocanda.

PERONOPLASMOPARA Clint. — ? Syn. *Pseudoperonospora* Rostow., Syll. XVII p. 520.

1. **Peronoplasmopara portoricensis** Lamkey in F. L. Stevens, Mycologia 3552

*) De qua cnfr. doct. monogr. Cl. J. Schweizer, *Die kleinen Arten bei Bremia Lactucae* Reg. *und ihre Abhängigkeit von Milieu-Einflüssen* - Inaug. Diss. Univ. Bern 1919 (Verh. thurgau. naturf. Ges., Heft. 23., 1919. 61 pag. cum icon.).

12., 1920, p. 52. — Maculis hypophyllis irregularibus; conidiophoris e stomatibus singulis v. 2-3 emergentibus, 80-300 × 5,5-11, pseudomonopodialiter 3-5 ramosis, ramulis ultimis acutatis 9-18 μ long.; conidiis ellipsoideis, hyalinis, 14-24 × 16,5-28; oosporis non praesentibus.

Hab. in foliis Meliae Azedarach [Meliaceae], Guanica Florida, America trop.

2. **Peronoplasmopara Humuli** Miyabe et Takahashi (descriptio nulla, 3553
cnfr. Syll. XXI, p. 861).

*) **PLASMOPARA** Schröter — Syll. VII p. 239, IX p. 342, XI p. 243, XIV p. 460, XVII p. 520, XXI p. 861.

1. **Plasmopara Wildemaniana** P. Henn. — Syll. XXI p. 861. — var. **ma-** 3554
crospora K. Sawada, Journ. Formosan Nat. Hist. Soc., 1914, pp. 2-4. — Tanaka, Mycologia 1922, p. 87. — A typo praecipue recedit conidiis majoribus, 14-18 × 11-13.

Hab. in foliis Justiciae procumbentis [Acanthaceae], in Insula Formosa Japoniae.

2. **Plasmopara Acalyphae** (Wilson) G. W. Wilson, Mycologia 10., 1918, 3555
p. 169, *Physotheca* A. Wilson, l. c. — Caespitulis hypophyllis sparsis densis albicantibus, maculis epiphyllis subbullatis e decoloratis flavescentibus v. obscure brunneis demum arescentibus quandoque infra rubescentibus; conidiophoris solitariis v. 2-3 e stomatibus exeuntibus, 300-500 × 5-7, supra 4-5-ramosis; ramis elongatis rectiusculis, ramulis saepe adpressis, ramulis ultimis rectis, leniter inflexis, brevibus, 4-10 μ long., plus minus conoideis et late truncatis; conidiis brunnescentibus, e ovoideis globosis, 12-22 × 10-16; oogoniis non visis.

Hab. in Acalypha virginica [Euphorbiaceae], Madison Wisc., Amer. bor. (T. T. Davis). — *Per. illinoisensi* Farlw. et *australi* Speg. proxima.

3. **Plasmopara cephalophora** Davis, Parasit. Fungi Wisconsin VI; 3556
Trans. Wisc. Ac. of Sc. etc. XIX, 1919, II, p. 709, cum icon. — Conidiophoris hypophyllis, effusis, crassis, rectis quandoque subclavatis, 150-270 × 6-14, simplicibus v. apice in ramulos parvos, breves (6-15 μ) sterigmata cylindracea, recta, truncata, quandoque

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*) Cnfr. Wartenweiler A., *Beiträge zur Systematik und Biologie einiger Plasmopara-Arten*, Ann. Mycolog. 16., 1918, pp. 249-299, cum icon. et 3 tab.

subinflata gerentes divisis; conidiis hyalinis, e ellipsoideis fusoideo-oblongis, utrinque plus v. minus acutis, uno latere depressis, stipitatis, apice papillatis, 45-70 × 20-33.

Hab. in foliis Physostegiae parviflorae [Labiatae], Shiocton, Plover, Dexterville, Wisc., Amer. bor. — Oosporis immaturis raro inventis.

4. **Plasmopara nivea** (Ung.) Schr. — Syll. VII p. 240. — A Cl. Caspary anno 1855 in *Peronosp. Umbelliferarum* (quae prioritatis causa ut synon. habenda est) distinctae sunt varietates (potius formae specificae), sequentes : 3557

Plasmopara Conii (Casp.) Trotter, forma minor, stipitibus $^1/_{17}$-$^1/_{11}$''' altis, ordinibus ramorum 1-2 ramellis ultimi ordinis brevissimis, subulatis, rectis, acrosporis majoribus. 3558

Hab. in Conio maculato, Europa media.

Plasmopara Angelicae (Casp.) Trott., forma major stipitibus $^1/_{13}$-$^1/_7$''' altis, ordinibus ramorum 2-4, ramellis ultimi ordinis longioribus, paululum curvatis; acrosporis majoribus. 3559

Hab. in Angelica silvestre, Europa media.

Plasmopara Chaerophylli (Casp.) Trott., ut antecedens, ramellis ordinis ultimi rectis. 3560

Hab. in Chaerophyllo silvestre, Europa media.

Plasmopara Aegopodii (Casp.) Trott., forma major, stipitibus $^1/_8$-$^1/_5$''' altis, ordinibus ramorum 2-3, ramellis ultimi ordinis rectis, brevissimis, acrosporis majoribus $^1/_{173}$-$^1/_{142}$''' latis $^1/_{148}$-$^1/_{123}$''' long. 3561

Hab. in Aegopodio Podagraria, Europa media.

SCLEROSPORA Schroeter. Syll. VII p. 238, IX p. 341, XIV p. 461, XVII p. 520, XXI p. 861.

1. **Sclerospora Mischanthi** T. Miyake, Rep. of work of Sugar exp. St. Gov. Formosa, Pathol. Bull. I (1911), 61 pag. 9 tav. 3562

Nomine nobis tantum nota.

Hab. in Mischantho (Graminaceae), in Japonia.

2. **Sclerospora Oryzae** Brizi, La peronospora del riso, « Natura » Milano 1919 v. 10., pp. 168-180, cum tab. col. — *Scl. macrospora* Sacc., Gabotto, Giornale di risicoltura, Vercelli 1915, n. 18., pp. 292-294, cum icon. 3563

Hab. in foliis, culmis et inflorescentiis Oryzae sativae, Italia bor. et Japonia.

3. **Sclerospora Sacchari** Miyake, Rep. of work of Sugar experiment Stat. Gov. Formosa, Path. Bull. I (1911), 61 pag. 9 tav. 3564

Hab. in plantis Sacchari officinarum, Zeae Maydis et Euchlaenae luxuriantis cultis in ins. Formosa,

nec non in plantis Saech. off. in Queensland et Ins. Fiji. — Conidiophora 170 μ longa.

4. **Sclerospora javanica** Bj. Palm, Mededeeling. van het Laborator. voor 3565
Plantenziekten n° 32 p. 18 cum icon., Batavia 1918. *Peronospora Maydis* Rac. 1897, Syll. XIV p. 460, non Butler. — Maculis striatis, albo-flavis, saepe totum folium occupantibus; mycelio intercellulari; haustoriis filiformibus dichotome ramosis; conidiophoris 1300 × 20-25, basim versus septatis; sterigmatibus 6-9 μ long., rectis; conidiis plerumque oblongo-rotundatis, 19-26 × 15-20, tubo germinantibus; oosporis non visis.

Hab. in foliis culmisque Zeae Maydis et Z. Maydis × Euchlaenae luxur. in Java, Madoerah et Sumatra.

5. **Sclerospora Maydis** (Raciborski) Butler, The dowrus mildew of Maize, 3566
Mem. of Depart. of Agricult. in India, Bot. Ser. vol. V n. 5 (1913) (*Per. Maydis* Racib.) Palm, l. c. p. 18. Syll. XIV p. 460. — Maculis albo-flavis, matricem leviter deformantibus; mycelio intercellulari, conidiophoris plus minusve 150 μ long.; sterigmatibus 15-20 μ long., rectis; conidiis oblongis, apice obtuse rotundatis 28-45 × 16-23, tubo germinantibus; oosporis non visis.

Hab. in foliis culmisque Zeae Maydis et Euchlaenae luxuriantis in India oriental. (Butler) et in ins. Philippinis (Baker), nec non in Bengala.

6. **Sclerospora philippinensis** W. H. Weston, Journ. Agric. Research 3567
19., 1920, p. 118, cum tabulis. — Syn. *Scl. Maydis* Reinking 1918, Philipp. Journ. of Sc. S. A., 13., n. 5, cum icon et tab., non Butler. — Maculas lineares v. irregulares, albido-flavas v. pallidas efficiens saepe totum folium discolorans et matricem plus minusve deformans; hyphis mycelicis inter cellulas in totas partes praeter radicem crescentibus, ramosis, tenuibus, plerumque 8 μ diam., sed irregulariter constrictis inflatisque; haustoriis simplicibus, vesiculiformibus subdigitatisve, minutis, 8 × 2; conidiophoris e stomatibus exeuntibus, erectis 150-400 × 15-26, in parte inferiore cellulas basilares gerentibus, superne 2-4-dichotome-ramosis, ramis robustis cum sterigmatibus conoideo-subulatis 10 μ long. leviter curvatis; conidiis elongato-ellipsoideis, elongato-ovoideis v. rotundato-cylindraceis variae dimensionis, plerumque 27-39 × 17-21, hyalinis, episporio tenue, intus minute granulosis, apice leviter rotundatis; basi apiculo minuto praeditis semper per tubum germinantibus; oosporis nondum visis.

Hab. in foliis, vaginis, glumis, culmis et inflorescentiis praecipue

Zeae Maydis, rarius Euchlaenae luxuriantis et Andropogonis Sorghi, per omnes partes in Ins. Philipp.

7. **Sclerospora spontanea** W. H. Weston, Journ. Agric. Research, 20., 1920, p. 678, tab. 76-79. — Conidiophoris 350-550 μ long. apice expansis, cellula basali 5-8 μ cr. 140-260 μ longa; supra 22-32 μ ad septum constrictis et tunc 20 μ cr., infra ramos constrictulis; ramis elongatis angustis parum recurvato-adscendentibus; sterigmatibus 13 μ long.; conidiis cylindraceis v. cylindraceo-ellipsoideis, 39-45 × 15-17; oosporis hucusque ignotis. 3568

Hab. in Zea Mays, Saccharo spontaneo et officinarum, quibus valde noxia, in Ins. Philippinis. — *Scl. philippinensi* affinis sed notis datis magis elongata et habitu graciliori, diversa.

BASIDIOPHORA Roze et Cornu — Syll. VII p. 239, IX p. 342.

1. **Basidiophora Kellermanni** (Ell. et Halst.) — Syll. IX p. 342 — var. **paupercula** Peck, N.Y. State Mus. Bull. 150 [1910] p. 64 (1911).— A typo differt maculis paucis, parvis, sparsioribus, candidis; oosporis globosis minoribus, 20-24 μ diam. 3569

Hab. in foliis vivis Ivae xanthifoliae [Compositae], Ohama, New Mexico, Amer. bor. (W. T. Swingle).

LABOULBENIOMYCETÆ Peyr. *)

Syll. VIII p. 909, IX p. 1130, XIV p. 725, XVI p. 674, XVII p. 915, XXII p. 1.

DIMEROMYCES Thaxt. — Syll. XIV p. 725, XVI p. 674, XVII p. 915, XXII p. 7,

1. **Dimeromyces Corynitis** Thaxt., Proc. Amer. Acad. 1912, p. 157, 3570
Spez. Lab. Arg. fig. 55.

Hab. in elytris Corynitis ruficollis, La Plata Arg. — Ind. masc.: long. tot., incl. pede (16 μ) 50-60 × 9; cellula append. 14-20 × 10-12; antheridium 35 μ, cell. ped. 9-18 × 6, venter 10 × 12.— Sporidia (intra perith.) 60 × 9; perith. 150-215 × 30-40; recept. ad apicem append., incl. pede, 80 × 100 μ.

2. **Dimeromyces Anisolabis** Thaxt., Proc. Amer. Accad. 1912, p. 156. 3571
Speg., Lab. Arg. fig. 54.

Hab. in superf. inf. abdominis Anisolabis anulipedis, Palermo et La Plata, Argent.— Indiv. masc.: long. tot. ad apicem antheridii (cum pede) 58; appendix 20 μ; recept. excluso pede 18-20 μ, antherid. incl. cellula ped. 31 × 8.— Ind. fem.: perith. 75-100 × 14; recept., excluso pede, 25-30 × 20; appendix primaria 40 μ app. inferiores, cellula fulcrante incl., 60-70 μ; long. tot. ad apicem perith., incluso pede, 100,150 μ.

3. **Dimeromyces Homophoetae** Thaxt., Laboulb. in Chrysom. 1914, p. 19. 3572
Hab. in prothorace et antennis Homophoetae aequinoctialis, Guatemala, Grenada ex Antill., Trinidad. — Ind. masc.: long. total. ad apicem append. 60 μ, ad apicem antheridii 80 μ et antheridii proliferi 112 μ; antherid. normale cum pede 35-40 × 6.

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*) Cfr. praeter Contributiones Thaxterianas, illas aeque eximias de Laboulbenialibus italicis et exoticis cl. prof. Caroli Spegazzini, imprimis vero ejus monographiam: Revision de las Laboulbeniaceas Argentinas, in Anal. del Mus. Nac. Hist. Nat. de Buenos Aires, tom. XXIX (1917) iconibus praeclaris et speciebus permultis novis ditissimam. Diagnoses latinae operis praetium augent. Tamen, ut olim monuit Saccardus, in determinandis his perquam singularibus plantulis icones maxime necessariae. Sincere fatemur expositionem sequentem e fontibus diversis haustam et tunc disparem, nonnisi ut inventarium specierum inservire posse.

Ind. fem.: sporidia 32 × 3,5; perithec. cum pede 100-190 × 20-35; longit. tot. incluso pede 100-190 × 20-35; long. tot. appendicis primariae 70 μ, ad apicem perithecii 140 250; appendix longior 90-110 μ.

4. **Dimeromyces Hermaeophagae** Thaxt., Laboulb. on Chrysom. 1914, p. 21. 3573

Hab. in antennis Hermaeophagae insularis, Grenada ins. Antill. (Bines). — Ind. masc.: long. tot. ad apicem appendicis 35 μ, ad apicem antheridii 50 μ. pes antheridii 16 μ, venter et rostrum 18; appendix 17 μ; Ind. fem.: perith., excluso pede, 60-70 μ; appendices secundariae 60-70 μ, primariae 20-25 μ; long. tot. ad apicem perith. 75-90 μ.

5. **Dimeromyces Aulecophorae** Thaxt., Laboulb. on Chrysom. 1914, p. 20. 3571

Hab. in elytris Aulecophorae posticae, Perak Malacae — Ind masc.: recept. 32 × 10, excl. pede; cellula basil. appendicis 16 × 6 et pars dist. 30-40 × 4; antherid. cum pede 30-40 × 5-6, pes 11 μ long. — Ind. fem.: perith. 175-250 × 24-28; sporidia 32 × 30; recept. 65 × 20; cell. basil. appendicis primariae 20 × 6,5, append. longior 130 × 3,5.

6. **Dimeromyces Longitarsi** Thaxt., Laboulb. on Chrysom. 1914, p. 22. 3575

Hab. in elytris Longitarsi testacei; L. subcincti, et Aphthonae Deyrollei, Arkansas, Am. bor. et Trinidad — Perith. 80-120 × 20-25; appendix secundaria 85-100 μ, appendix primaria inclusa spina 25 μ.

7. **Dimeromyces brachiatus** Thaxt., Proc. Amer. Acad. 1915, p. 6. 3576

Hab. in elytris Heterophagae sp., Peradeniya Ceylon. — Ind. mas.: receptac. 46 × 12; pes 18 μ; appendices 28 × 4; antheridium 27 × 9. — Ind. fem.: perithec. 90-120 × 15-20, cell. basil. 12 × 8; receptac. 18-22 × 4; axis secundarius 580 × 12, appendix 20-28 × 4.

8. **Dimeromyces Petchi** Thaxt., Proc. Amer. Acad. 1915, p. 7. 3577

Hab. in prothorace Tachys (?) minutae speciei, Peradeniya Ceylon (Petch). — Ind. masc. recept., incluso pede et cellula basilari primariae append., 45-80 × 15-20, antheridia 28 × 9; ind. fem. sporidia 30 × 4; perithecia 75 × 20-24; receptaculum 55-65 × 25; appendices 40-45 × 7-8; long. tot. ad apicem perithecii 120-135.

9. **Dimeromyces appressus** Thaxt., Proc. Amer. Acad. 1915, p. 8. 3578

Hab. in superficie infer. abdominis et in forcipe Labiae pilicornis, Peradeniya Ceylon — Ind. masc.: recept. excluso pede 10 × 9; antherid. 18 × 6; appendix 20-24; longit. tot. ad apicem appendicis 30 μ. — Ind. fem.: perith. 45 × 12 pars ascig., pes 70-80 × 10; sporidia 28 × 2,5; receptac. inclusa cellula basil. 20 × 10; appendix primaria excl. cellula basil. 12-16 × 5; appendix secundaria 35-45 × 5,5.

10. **Dimeromyces Lavagnei** Picard, Bull. Scient. France Belgique 50., 1910-1917, p. 441. Descriptio ex Maire, III. Contrib. étude Laboulb. Afrique du Nord, Alger 1920, p. 6, fig. 1. – Dilutissime lutescens; receptaculi contorti, 5-cellulares (73 μ long.), cellula basali obconica, ungue nigro basi hyalino, apice hyalino-punctato praedita, septo primo transversali, cellula subbasali triangulari, appendicem primariam gerenti; cellulis distalibus 3, subquadrangularibus, septis obliquis praeditis, quaque appendices secundarias 2 gerenti; app. primariae breves (40 × 6), 4-cell., cellula basali triangulari minuta, cellulis mediis subelongatis parvis, cellula distali paullulum dilatata, elongata, subcompressa, apice rotundata; app. secundariae longiusculae (63-108 μ), perithecii apicem vix attingentes, angustae lineares, geminatae, cellula basali inflata, cellulis mediis cylindricis, cellula subterminali rigida, atrofusca, cellula distali longissima, flexuosa, compressa, sensim attenuata, apice obtusa; perithecio sessili, asymmetrico, curvulo, apice in rostrum brevem abruptiuscule attenuato; ostiolo rotundato regulari; cellula ascogenica elongata laterali; ascosporae fusiformes, 30 × 3,5, 1-septatae, basi rotundatae, cellula superiore inferiore quintuplo longiore, calyptra gelatinosa septum non attingenti praedita. — Totus 167 μ long. 3579

Hab. in Microleste minutulo, Lattes Herault Gallia (Lavagne), nec non in M. laevipenni, prope Hipponem Numidia.

11. **Dimeromyces Taxteri** Maire, Bull. Soc. Hist. Nat. Afrique du Nord, t. VII 1914 p. 100. — Syn. *Dimeromyces falcatus* Thaxt., Proc. Amer. Acad. 1915, p. 4, non Paoli 1911. 3580

Hab. in antennis Grylli mitrati, Semarang, Java.— Ind. masc.: long. tot., inclusa appendicis cellula term. (12-15 μ) et pede (25 μ) 80-94 × 8; antheridium incluso pede 40 × 5; ind. fem.: perith. 85-100 × 20-24; sporida fem. 18 × 3; long. tot. ad apicem append. 350-390 μ; recept. 80 × 20 e facie 30 μ; append. secund. 45-70 μ.

12. **Dimeromyces Bordei** R. Maire, Bull. Soc. Hist. Nat. Afrique du Nord, t. 11., 1920, Extr. p. 4, tab. I fig. 1-5. — Fungo masculo (totus 65-75 alt.) dilutissime rufo-brunneo; receptaculo e 3 cellulis obliquis contexto; cellula basali elongata obconica; cellulis superioribus subaequalibus, 2 antheridia composita et appendicem terminalem bicellularem, conicam, apice acutiuscula, antheridium superiorem subaequantem, hyalinam, gerentibus. Antheridiorum hyalinorum, lageniformium, in collum breviusculum rectum v. curvatum abruptiuscule contractorum pedicellis unicellularibus, dilu- 3581

tissime rufo-brunneis, brevibus, cum cellulis vicinis concrescentibus. Fungi foeminei (tot. 160-200 μ alt.) concoloris receptaculo e 3 cellulis valde obliquis, contexto; cellula basali paullum elongata, cellulis superioribus brevioribus subaequalibus; cellula subbasali appendicem secundariam ventralem, erectam, hyalinam, flagelliformem, 4-6 cellularem, $^2/_3$ ad $^3/_4$ perithecii aequantem, basi cum cellula receptaculi distali et cum perithecio concrescentem, gerenti. Perithecii fusiformi-incurvati, asymmetrici, pedicello mox cum cellulis basalibus confuso, indistincto; perithecio apice in rostrum breviusculum ostiolum obtusum subhyalinum gerentem sensim attenuato, infra ostiolum et rostrum vix constricto; cellula ascogenica unica; ascosporis homomorphis, fusiformibus, hyalinis, laevibus, utrinque, acutis, 1-septatis, muco praeter apicem cellulae inferioris obvolutis; ascosporae cellula inferiori $^1/_4$ cellulae superioris aequanti.

Hab. in elytris Thyamidis parvulae Payk., prope Hipponem Reg. Numidiae, Africa bor.

13. **Dimeromyces Kamerunensis** Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, p. 700. — ♂ Exiguus, hyalinus dein leniter brunneo tinctus, axis tricellularis, cellulis parum longioribus quam crassioribus; antheridium unicum, raro duo, ventricosus, e parte distali curvula sensim angustatus 30 × 8, pede nigro crassiusculo; appendices 20-4 × 4. ♀ Axis receptaculi supra brunneum infra hyalinum, e 6-12 (v. ultra) cellulis superpositis efformatum, cellula basali pluries longiori quam crassiori sed basim versus leniter angustata; appendicibus erectis v. leniter divergentibus, demum obscure brunneis; peritheciis 1-2, uniformiter pallide flavido-brunneis, apice hyalinis appendicibus subaequantibus v. subbrevioribus 88-105 × 14-21, appendicibus 105 × 12, appendicibus primariis circ. 25 × 3. 3582

Hab. ad capitem et crura Oscinidae (Diptera) cujusdam, Kamerun Africa trop. — Proxima *D. coarctati.*

14. **Dimeromyces Oscinosomalis** Thaxter, Proc. Amer. Ac. of Sc., 53., 1918, p. 701. ♂ perfecte hyalinus parietibus tenuibus praeditus, et tunc aegre visibilis, e tribus cellulis superpositis, inferiori latiori et infra parum inflata efformatus. Antheridiis unum v. duobus oblique superpositis, leniter divergentibus, receptaculo 25 μ, antheridio 18 × 5. — ♀ habitu sigmoidea. Axe receptaculi plerumque ex sex cellulis efformato, basali longiori quam latiori infra rhizoideo; appendicibus secundariis plerumque tribus raro quatuor, longis gracilibus demum obscure brunneis; peritheciis plerumque simplicibus, 50-65 × 16-20; receptaculo, processu rhizoideo excepto, 35-50 3583

× 12-16; appendicibus primariis 18 μ, secundariis usque 125 × 8, totus fungus 75-95 μ long.

Hab. in inferiori parte abdominis Oscinosomae inaequali (Diptera), Sarawak Borneo. — *D. pedali* et *rhizophoro* proxima species; sed differt a *pedali* processu rhizoideo et forma terminatione peritheciali, a *rhizophoro* appendicibus longioribus processu rhizoideo simplici, etc.

15. **Dimeromyces pedalis** Thaxter, Proc. Amer. Ac. of. Sc., 53., 1918, p. 699. — ♂ Hyalinus, axis tricellularis, cellula basilari latiori pede nigro bene evoluto praedita, caeteris angustioribus subaequalibus; antheridio erecto, e apice 28 μ longo 8 μ cr., antheridio proprio 18 × 5, appendicibus 18 × 3. ♀ Tota, sed praecipue appendices plus minus brunneo-flavido tinctae; axis receptaculi plerumque 8-cellularis utrinque parum acutato; appendices primariae erectae terminales septo obscuro divisae, secundariae plerumque quatuor quandoque tres, breviusculae; perithecium 42-52 × 14; receptaculum 35-40 × 8; sporis 18 × 2,5; appendices primariae 30 μ, secundariae 40-50 μ. 3584

Hab. ad crura Oscinosomae inaequalis (Diptera), Sarawak Borneo. — Species inter *D. Oscinosomalis* et *D. coarctatus* media.

EUDIMEROMYCES R. Thaxter, Proc. Amer. Ac. of Sc. 54., 1918, p. 215. ♂ Ex tribus cellulis superpositis ab antheridio simplici terminatis efformatus; ♀ appendices primariae a receptaculo non distinctae, secundariae steriles nullae. Coeterum ut in *Dimeromyces* cui affinis.

1. **Eudimeromyces Chiliotis** R. Thaxter, l. c. p. 216. — ♂, gracilis hyalinus tribus cellulis longitudine et crassitudine subconformibus, antheridio conoideo 12 μ long.; totus cum pede 25 × 4. — ♀ Hyalina; receptaculo e cellula basilari et plerumque e 4 cellulis subtransverse dispositis efformato; peritheciis pedicello incluso 65-75 × 14-15, sporis 20 × 2,6; receptaculo 14-17 × 11-13; appendicibus longis 110-120 × 8. Totus fungus ex apice perithecii 80-100 μ long. 3585

Hab. in elytra Chiliotis formosi, Baños de Apoquindo et Corral, Chile, America austr.

DIMORPHOMYCES Thaxt. — Syll. XI p. 446, XIV p. 725, XVI p. 674.

1. **Dimorphomyces platensis** Speg., Lab. Arg. p. 517 fig. 60 — Masculus pallidus, appendice obtusiuscula, antheridio hyalino acute rostrato patente. Foemineus totus subincarnato-melleus, axi primario 2-mero, ramo laterali unico e margine interno 5-8-cellulifero, dentibus non- 3586

nullis cellula fusca subglobosa v. appendice 3-5-mera gracili subpallida v. perithecio coronatis; perithecio erecto, recto v. subsigmoideo e clavato subfusoideo subrufescente superne infuscato lineola transversa ab ostiolo late conico separato.

Hab. in toto corpore Apocelli parvipennis, La Plata — Antherid. 50 × 10 (mas); perith. 80-125 × 20-28 (foem.).

2. **Dimorphomyces Trogophloei** Speg., Lab. Arg. p. 519 fig. 61. — Ma- 3587
sculus ignotus. Foemineus parvus patentim bifidus, axi primario sterili minuto bicellulari obscure fumoso, secundariis vix fumosis appendicibus plurimis versiformibus ornatis; peritheciis subcylindraceis sursum infuscatis linea transversa tenui strangulata ab ostiolo subconico crassissimo fere truncato limitatis.

Hab. in abdomine Trogophloei tenuipuncti, in ins. Santiago, La Plata, Argent. — Alt. tot. 95-110 μ; perith. 55-65 × 18-20.

3. **Dimorphomyces vulgatissimus** Speg., Lab. Arg. p. 520 fig. 63. — Ma- 3588
sculus parvus pallide rubescenti-fumosus, appendice 4-5 mera acuta, antheridio ovato longe tenuiterque attenuato-rostrato. Foemineus magnus plus minusve patentim bifidus, axi primario centrali 2-3 articulato fusco, ramis lateralibus adscendentibus v. patulo-reflexis, margine interno 7-15 cellulosis, ibique appendic. brevibus crassis fuscis v. elongatis filiformibus pallidis v. peritheciis nonnullis onustis; perithec. cylindraceo-obclavatis, rubescenti-fuligineis in parte crassiore supera praecipue, apice conoideo-attenuato, obtuse acutatis.

Hab. pervulgatus in toto corpore Apocelli Argentini, A. Mendozani et A. opaci, Montevideo, San Luis et La Plata — Anther. 33-40 × 12 (mas), perith. 175-200 × 22-25 (foem.).

4. **Dimorphomyces argentinensis** Speg., Laboulb. Argent. in Anal. Mus. 3589
Nac. Buenos Aires, XXIII p. 187 (1912) fig. 14. — Totus melleus; receptaculis saepius plus minusve scorpioideis, masculis minoribus plerumque 2-4-antheridiferis, foemineis majoribus 2-12-perithecigeris; peritheciis lanceolato-conoideis, 75-80 × 15-20, ostiolis attenuato-rotundatis.

Hab. in Myrmedonia argentina?, La Plata, Argentina — *D. Myrmedoniae* Thaxt. proximus.

5. **Dimorphomyces Meronevae** Thaxt., New or crt. Laboulb. f. Argent., 3590
Proc. Amer. Acad. 1912, p. 158. — Ind. masc.: recept. cum pede 40 × 23; appendix 17 μ; antherid. 32-35 μ, rostrum 15, venter 10 μ, cellula ped. 9 μ. — Perith. 65-70 × 12-15; sporidia (intra perith.) 14 × 1-5;

receptac. cum pede 18 μ; recept. secundarium 18-35 μ; append. primariae 18 × 9.

Hab. in artubus Meronevae Sharpi, Temperley Buenos Aires, La Plata Argent., socio *Monoicomycete nigrescenti* — Teste Speg., Lab. Arg. (1917), p. 517 n. 59 cum ic., *D. Meroncvae* a *D. argentinensi* non differt.

6. **Dimorphomyces verticalis** Thaxt., Proc. Amer. Acad. 1912, p. 159, 3591
Speg. Lab. Arg. fig. 62.

Hab. in insecto Atheta sp., Palermo et Sta Catalina Argent.— Indiv. masc.: long. tot. cum pede 60 μ, anthérid. cum cellula ped. 35 μ, rostrum 8, appendix 20-30 μ; indiv. fem. perith. 75-100 × 15-20; appendices secundariae 25-30; long. total. ad apicem perith. altioris 100-200 μ, ad apicem recept. secund. 75-120.

RICKIA Cavara — Syll. XVI p. 689, XXII p. 7.

1. **Rickia argentinensis** Speg., Laboulb. Arg. p. 664 fig. 194. — Pallidissime mellea, parva, simplex, cellulis receptaculi 5-6, basali brevi subcylindracea, caeteris tristiche dispositis, 2 dorsalibus 3 ventralibus etiam superpositis et 2 centralibus collateralibus basi dorsoque perithecii adnatis, perithecio apicali ovato ultra medium exerto et libero. 3592

Hab. in dorso abdominis Trogophloei bilineati in ins. Santiago La Plata — Perithecia 50-60 × 28-30; alt. tot. 75-100 × 30-35.

2. **Rickia formicicola** Speg., Laboulb. Arg. p. 665 fig. 195. — Parvula, 3593
subhyalina, receptaculo minimo, cellula basali subcylindracea brevi, cellulis receptacularibus, dorsalibus ternis dorso perithecii adnatis, suprema appendice setuliformi fusca apice capitata producta, ventralibus angustis tristichis, omnibus cellula altera appendice etiam setuliformi apice capitata praeditis, perithecio sublageniformi inaequilaterali ovato grosse umbonato ostiolo obliquo obtuso subbilabiato donato.

Hab. in abdomine Psenolepidis Silvestrii in insula Santiago La Plata — Perith. 32-40 × 20-22; append. 40-70 μ; alt. tot. 55-60 μ.

3. **Rickia perpusilla** Speg., Laboulb. Arg. p. 666 fig. 197. — Perpusilla, 3594
tota hyalina; cellula basali mediocri obconica; cellulis receptacularibus tristichis; serie infera dimera, articulo basali subelliptico connato, supero conico-mucroniformi libero; serie secunda v. intermedia etiam dimera, articulis connatis, apice in androsticho 7-8

mero appendiciformi elongato gracili, cujus cellulis duabus inferis majoribus quarum superiore 1-antheridifera; serie tertia 1-mera basi et dorso adnata, superne cellulis 2 collateralibus connatis subpedicelliformibus coronata; perithecio cellulis praecedentibus insidente, omnino libero, ellipsoideo recto obtuso minute ostiolato.

Hab. in elytris Phalacri sp.?, frequens Sta Catalina B. A. et La Plata. — Perith. 30-35 × 13-14; alt. tot. 60-70 × 10-12 (excl. append.).

4. **Rickia platensis** Speg., Laboulb. Arg. p. 667 fig. 198. — Parvula, 3595
hyalina; cellula basali subturbinata, mediocris; cellulis receptacularibus tristichis, serie dorsali extima 10-15-mera, sursum libera caudiformi patentiuscula, perithecium plus minusve superante; serie intermedia 5-7-mera, praecedenti sequenti nec non perithecio adnata, articulis superis paraphysibus filiformibus brevibus nonnullis v. antheridio uno alterove praeditis; serie tertia intima seu ventrali 3-mera, cum perithecio ceterisque connata; perithecio ovato, recto v. inaequilaterali, superne sensim conico-attenuato, apice obtuso minute ostiolato.

Hab. in elytris Europis vicini, Sta Catalina B. A. Argent. — Perith. 40-50 × 22-25; alt. tot. 70-100 × 32-35.

5. **Rickia pumila** Speg., Laboulb. Arg. p. 668 fig. 199. — Pusilla, tota 3596
hyalina, cellula basali subturbinata pro ratione majuscula; cellulis receptacularibus tristichis, serie externa dorsali 10-12-mera, sursum libera caudiformi perithecium duplo superante, serie intermedia 4-6-mera praecedenti sequenti perithecioque adnata, articulis 1 v. 2 superis antheridio uno alterove praeditis, serie tertia intima seu ventrali 2-3 mera perithecio caeterisque confluente; perithecio ovato superne subcoarctato obtuse breviterque conico-ostiolata.

Hab. in elytris Orthopteri cujusdam (Sacium?), Sta Catalina B. A., Argentina — Perithecia 22-25 × 13-15; alt. tot. 75-85 μ.

6. **Rickia rhacomycoides** Speg., Lab. Arg. p. 669 fig. 200. — Submaju- 3597
scula, receptaculo obconoideo, cellulis omnibus arcte adnatis obscure tetrastichis, centro fumoso, margine atro squamoso, perithecio magno elliptico-conico acuto, ostiolo vix manifesto.

Hab. in elytris Scydmaenidei cujusdam in ins. Santiago, La Plata, Argent.— Perithecia 80-90 × 38-42; receptaculum 90-110 × 38-45.

7. **Rickia Coprighis** Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. 3598
Buenos Aires, XXVI (1916) p. 507 fig. 47. — Parvula, 75-100 ×

25-35, hyalina; stipite unicellulari subcylindraceo, 20-30 × 10, apice cellulas binas sustinente, cellula ventrali cellula altera coronata superne in perithecio ovoideo 30-35 × 12-15 producta, e latere antheridio ornata; cellula autem dorsali seriebus duabus heptameris cellularum superpositarum aucta, series interna 50 μ, externa 60 μ longa, series externa inter dentes seu sinus antheridios abortivos, basi nigro-annulatos praebente.

Hab. in Coprighis cultratello (ex Acaridis) in ins. Java (A. Berlese). — *R. minutae* Paoli certe affinis, sed habitat et loco, nec non notis peculiaribus nonnullis distincta.

8. **Rickia Jacobsoni** Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. 3599
Buenos Aires XXVI (1915) p. 508 fig. 48. — Majuscula, 175-200 μ alta, sat regularis, tota hyalina; cellula basali cylindracea 50-75 × 10-15; cellulis in receptaculo tristichis, serie prima 4-mera perithecium ovatum 65-80 × 30-40 fulcente, secunda interna dorso perithecii adnata 11-12-mera, tertia vel dorsali externa etiam 11-12-mera, latere altero serie centrali adnata, altero dense tristiche antheridifera, ambabus apice in cornu crasso brevi 4-5-cellulari obtuso confluentibus; antheridiis numerosissimis, psallio nigro pusillo ornatis.

Hab. in Megalolaepas Nederweni in ins. Java (leg. Jacobson, comm. A. Berlese) — Statura majuscula, cornu apicali, etc. bene distincta.

9. **Rickia Silvestrii** Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. 3600
Buenos Aires XXVI (1915) p. 509 fig. 49. — Pusilla, 75-80 μ alta, tota hyalina; cellula basali cylindracea, sursum dilatata, 20 μ alta; cellulis receptaculi distichis, serie altera bicellulari perithecium ovatum 40-45 × 20-22 fulcente, altera 6-7-mera, dorso perithecii adnata et breviore, margine externo paraphysibus bacillaribus 5-6, erectiusculis, 40-50 × 3, basi psallio minuto nigro ornatis donata.

Hab. in Hypoaspide Spegazzinii Berl., Mayabal, Erythraea (F. Silvestri). — Ad genus *Distichomyces* transit.

10. **Rickia Peyerimhoffii** Maire, Bull. Scient. Fr. et Belg., t. 49., 1916, 3601
p. 290, cum icon., et III. Contrib. étude Laboulb. Afrique du Nord, Alger. 1920, p. 9. — Majuscula subregularis, cellula basali hyalina excepta mellea, cellulis in receptaculo tristichis, basalibus brunneo-suffusis, serie anteriore 20-23-mera, perithecio 8-10 cellulis adnata, serie posteriore 19-20-mera in appendicem primariam supra medium peritheciorum desinente, utraque extus appendici-et antheridifera; serie centrali 16-18-mera cellulis 8-9 dorso perithecii ad-

nata, supra appendicem primariam ad quartum superiorem perithecii desinente. Appendicibus cum antheridiis in parvos greges (2-3) congregatis, basi psallio nigro hypocrateriformi instructis ; appendicibus subhyalinis complanatis, hospiti adpressis, linearibus v. spathulatis, antheridiis subaequilongis ; antheridiis lageniformibus plerumque curvulis, rostro brunneo suffuso, ventre ex hyalino brunneolo, simplicibus. Perithecio ellipsoideo-oblongo, apice brunneo-suffuso et maculis atris 2 notato, non constricto, ostiolo subhyalino. Ascosporis inter $^1/_4$ et $^1/_3$ inferiorem septatis, hyalinis, laevibus, muco obvolutis.

Hab. in prothorace Scaphosomatis agaricini L. et flavonotati Pic, prope Kolea et C. Bône, in Algeria et Mauretania, Africa bor.

11. **Rickia Lispini** Thaxt., Proc. Amer. Acad. 1912 p. 160, Speg. Lab. Arg. fig. 196. 3602

Hab. in abdomine etc. Lispini tenelli, Sta Catalina, Buenos Aires, La Plata (Speg.), Llavallol Argent. nec non Los Amates Guatemala. — Sporidia 28 × 4 ; perithec. 40-50 × 27-31 ; receptac. 60-75 × 28-35 ; appendices 20-55 μ ; long. tot. 75-120.

12. **Rickia Melanophthalmae** Thaxt., Proc. Amer. Acad. 1912, p. 161. 3603

Hab. in elytris minutae spec. Melanophthalmae, Llavallol Argent. — Perith. 35-43 × 23 ; sporidia 40 × 2,5 ; recept. 40 × 27-31 ; longit. tot. 75-85 μ.

13. **Rickia furcata** Thaxt., Proc. Amer. Acad. 1912 p. 366. — Furcata 3604 v. irregulariter ramosa ; appendicibus subcylindricis 8-16 × 2,5 ; perithecio 30-40 × 8-10, incluso apiculo (2,5-3 longo) ; sporis 25 × 2,5 ; longitudo tot. usque ad apicem perithecii 40-70 μ, ad apicem rami posterioris 50-175 μ.

Hab. in insecto Euzerconis sp., Trinidad, Manaos Amos. Granada W. J.

14. **Rickia arachnoidea** Thaxt., Proc. Amer. Acad. 1912 p. 367. — Re- 3605 ceptaculo sursum in ramulos saepius furcatos, arachnoideos diviso ; appendicibus brunneolis, 7-18 × 4 ; peritheciis 70 × 18-20 ; sporis 30 × 3 ; ramis 8-10 μ cr., longioribus usque ad 460-520 μ long., cellula basilari et subjuncta appendicis primariae 18-20 × 4.

Hab. in insecto Discopomae, sp., Euzerconis sp., Trachyuropodae, Trinidad.

15. **Rickia Discopomae** Thaxt., Proc. Amer. Acad. 1912 p. 369. — Hya- 3606 lina demum brunneola ; peritheciis 48-52 × 18-25 ; sporis 30 × 5 ; appendicibus 7-10 × 3-4 ; longitudo totalis 250-350 × 18-32 (e basi

perithecii).

Hab. in superficie sup. Discopomae sp., Peradeniya, Ceylon.

16. **Rickia elegans** Thaxt., Proc. Amer. Acad. 1912, p. 370. — Recta v. curvula, basim versus sensim angustata; perithecio 65-85 × 20; appendicibus 15 × 4; longitudo totalis 200-220 × 35-40. 3607

Hab. in artubus et corporis margine Discopomae sp., Peradeniya, Ceylon.

17. **Rickia pulchra** Thaxt., Proc. Amer. Acad. 1912, p. 371. — Cellula basilari varie evoluta, breviuscula, 18-50 × 6-15; appendicibus 35-60 × 4-6; peritheciis 35-40 × 15; sporis 22 × 3,5; longitudo totalis, excluso pedicello, 48-56 × 35-38. 3608

Hab. in superficie inferiore et artubus Macrocheles et Celaenopsis, Kamerun Africae.

18. **Rickia obcordata** Thaxt., Proc. Amer. Acad. 1912, p. 372. — Hyalina; cellula basilari, incluso pede, 28-35 × 15-18; perithecio 60 × 25; appendicibus 24-35 × 5; antheridiis emergentibus 12 μ; corpore subobcordato 90-100 × 78-85. 3609

Hab. in Insecto cujusd. minuto (ex Coleopt.), Kamerun Africae.

19. **Rickia elliptica** Thaxt., Proc. Amer. Acad. 1912, p. 373. — Hyalina ambitu subelliptica; cellula basilari, incluso pede, 8-16 μ longa; perithecio 30-40 × 10-12, excluso processu (7 × 2); sporis 22 × 2,5; corporis long. totalis 50-66 × 35-40. 3610

Hab. in artubus Discopomae sp., Trinidad.

20. **Rickia inclinata** Thaxt., Proc. Amer. Acad. 1912, p. 374. — Minuta hyalina irregulariter rotundata; cellula basilari 25 × 8 (incluso pede); perithecio 38-40 × 11; sporis 25 × 3; appendicibus hyalinis, leviter tenuatis, 16 × 3, septo basali manifestissimo; long. tot. corporis ad apicem perithecii 50 × 41-44. 3611

Hab. in Insecto cujusd. minuto indet. (ex Coleopt.), Trinidad.

21. **Rickia Celaenopsis** Thaxt., Proc. Amer. Acad. 1912, p. 375. — Hyalina, minuta, ambitu subangulosa; cellula basilari 25 × 8, incluso pede; perithecio 40 × 20; sporis 20 × 3; antheridio 12 μ longo; longitudo tot. ad apicem perithecii 50 × 38. 3612

Hab. in artubus Celaenopsis sp., Trinidad.

22. **Rickia discreta** Thaxt., Proc. Amer. Acad. 1912, p. 375. — Hyalina, elongata; appendicibus flavidis, subcylindricis, anulo basilari nigro conspicuo, 15-25 × 3,5; primaria 30-45, cellulis basilaribus binis 10 × 4; peritheciis 25 × 9; cellula basilari 20 × 7, incluso pede; totali longit, ad apicem perithecii 55-65 × 18-22. 3613

Hab. in Gamaside, Trinidad.

23. **Rickia spathulata** Thaxt., Proc. Amer. Acad. 1912, p. 376. — Ambitu (excepto vertice perithecii) spathulata; perithecio 40-46 × 16-20; cellula basilari, incluso pede, 28-33 × 9-11; sporis 28 × 3; appendicibus 6 × 2, fumoso-brunneis, facile deciduis; longit. total., excl. appendice primaria, 12-16 × 6-8. 3613

Hab. in artubus Celaenopsis, Amazonia.

24. **Rickia excavata** Thaxt., Proc. Amer. Acad. 1912, p. 377. — Subtriangularis; subconcava; sporis 18 × 3; perithecio 30 × 10; appendicibus subcylindraceis, minutis, 6 × 2,5; cellula basilari 20 × 6; longit. total. ad verticem perithecii 75 × 34, exclusa cellula basilari appendicis primariae. 3614

Hab. in Insecto Celaenopsis, Trinidad.

25. **Rickia euzerconalis** Thaxt., Proc. Amer. Acad. 1912, p. 378. — Breviter spathulata hyalina perithecio angusto erecto vertice extus libero, 22-24 × 8; sporis 25 × 2,5; appendicibus obtusis, flavido-brunneis 7 × 3,5; sporis 25 × 2,5; cellula basilari 14-16 × 6-8; longit. total. ad verticem perithecii 50-70 × 24-32; cellulis binis appendicis primariae 12-15 × 5. 3615

Hab. in Insecto, Euzerconis sp., Kamerun Africae.

26. **Rickia Megisthoni** Thaxt., Proc. Amer. Acad. 1912, p. 379. — Hyalina; appendicibus brevissimis, minutis 5 × 2,5; sporis 20 × 2; peritheciis 30-32 × 8-11; cellula basilari 16 × 7, incluso pede; longit. tot. ad verticem perithecii 50-60 × 20. 3616

Hab. in Insecto Megisthani sp., Trinidad.

27. **Rickia kamerunana** Thaxt., Proc. Amer. Acad. 1912, p. 380 — Hyalina, asymmetrica; appendicibus brevibus, obtusis, 10 × 3; sporis 18-20 × 2; perithecio; 30-34 × 6-8; cellula basilari, excluso pede, 8 μ longa; cellulis binis basilaribus appendicis primariae 8 μ; longit. total. ad verticem perithecii 40 × 20. 3617

Hab. in Insecto Euzerconis sp., Kamerun, Africae.

28. **Rickia filifera** Thaxt., Proc. Amer. Acad. 1912, p. 381. — Minuta, gracilis; appendicibus gracilibus, cylindraceis, hyalinis, 10 × 2; sporis 24 × 2,5; peritheciis 35-45 × 8-12; cellula basilari, incluso pede, 12 × 4,5; long. tot. ad verticem perithecii 35-45 × 8-12; flagello libero longiore 175 μ longo. 3618

Hab. in Coleoptero majusculo, Magistkano affini, Passali, Kamerun Africae.

29. **Rickia rostrata** Thaxt., Proc. Amer. Acad. 1915, p. 10. 3619

Hab. in elytra dextera Tanygnathi ruficollis, Java et Saraw Borneo. — Sporidia 20 × 7,5; venter perithecii, excl. cell.

margin. axis 42-48 × 25-28; process. rostr. 63-72 × 10-12; appendix secund. 24 × 3,5; longit. tot. ad apicem perith. 240-450 × 20-35.

30. **Rickia Tomari** Thaxt., Proc. Amer. Acad. 1915 p. 11. 3620

Hab. in elytris Tomari sp., Peradeniya Ceylon.— Perith. 80-90 × 22-24; antheridia 10 × 3,5; long. tot. ad apicem perith. 135-150 × 30-36.

31. **Rickia marginata** Thaxt., Proc. Amer. Acad. 1915 p. 12. 3621

Hab. in corpore Heterophagae punctulatae, Peradeniya Ceylon. — Perithec. 75-80 × 35-38; sporidia 46 × 4,5; recept. 150-625 × 46-85; appendix later. 30-80 × 5; terminalis 300 × 8.

32. **Rickia coptengalis** Thaxt., Proc. Amer. Acad. 1915 p. 13. 3622

Hab. in Coptengi Shepardi in insula Djilolo Indo-Malayae· — Perith. 100-112 × 28-30; long. tot. ad apicem perith. 450-500 μ, latit. 40 μ; antheridia 12 μ; appendix 8 μ.

33. **Rickia Onthofagi** Thaxt., Proc. Amer. Acad. 1915 p. 15. 3623

Hab. in abdomine Onthophagi sp. Peradeniya Ceylon. — Perithec. 65-100 × 28-35; sporid. 50 × 7 (intra perith.); antheridia 15 × 5; appendices 4 × 3,5; longit. total. ad apicem perith. 260-340 × 40-44.

34. **Rickia compressa** Thaxt., Proc. Amer. Acad. 1915 p. 16. 3624

Hab. in antennis et prothorace Leptochiri sp. v. aff., Java (Ronyer). — Perith. 60-75 × 20-22; recept. ad apicem appendicis primariae 140-155 μ; appendix secundaria 20-40 × 4-5; longit. tot. ad apicem perithecii 175-200 × 32-35.

35. **Rickia Uropodae** Thaxt., Proc. Amer. Acad. 1915, p. 17. 3625

Hab. in corpore Uropodae sp., Large Passali, Ins. Java (Thompson). — Perith. 60 × 18; pars basilaris appendicis prim. 16 × 8, appendices secundariae 18 × 9; longit. total. 100-120 × 30.

36. **Rickia uncinata** Thaxt., Proc. Amer. Acad. 1915, p. 18. 3626

Hab. in artubus Macrocheli·s sp., (Large Passali) Java (Thompson). — Perith. 38-42 × 12-16; appendix primaria, inclusa basi, 24 μ; appendix secundaria 12 × 4; long. tot. 150-500 × 10.

37. **Rickia nutans** Thaxt., Proc. Amer. Acad. 1915 p. 19. 3627

Hab. in apice abdominis Macrochelis, (Large Passali) Peradeniya Ceylon.— Perithecia 58-66 × 20; appendix apicalis 15-16 μ; longit. tot. 750, diam. circ. 12.

38. **Rickia passalina** Thaxt., Proc. Amer. Acad. 1916, p. 17. 3628

Hab. in insectis Passalo cornuto aliisque spec., Kentucky, Para et Manaos Bras., Grande Etang Grenada, Dominica, Nicaragua, Guatemala. — Sporidia 20 × 2,5; perith. 40 × 10, long. tot.

axeos 150-900 × 8-12 ; appendices 9-12 × 2,5.

39. **Rickia apiculifera** Thaxt., Proc. Amer. Acad. 1915, p. 18. 3629

Hab. in Passalo tlascala et Neleida Antillarum, Grand Etang Grenada, Guatemala, Jucatan, Nicaragua. — Sporidia 25-28 × 3-4 ; perith. 30-50 × 10-16; long. tot. maxime varia 100-1000 × 10-20 ; appendices 18-20 × 3,5.

40. **Rickia bifida** Thaxt., Proc. Amer. Acad. 1916, p. 19. 3630

Hab. in insect. variis ex Passalineis, Guatemala, Nicaragua, Rio de Janeiro, Amazonia. — Sporidia. 28 × 2,5; perithec. 35-40 × 10, cellulae margin., 3,5 μ, pes 9 × 6-7 ; receptaculi pes 7-12 × 7-12 ; divisiones longiores 75-100 × 5,5 7 ; pars libera appendicis primariae 12-16 × 3,5-4 ; appendices 15-20 × 3.

41. **Rickia dichotoma** Thaxt., Proc. Amer. Acad. 1916, p. 20. 3631

Hab. in superf. super. Euzerconis speciei parasiticae in insectis Passalineis, Hayti. — Sporidia 30 × 3,5 ; perith. 55-65 × 14-18, cellulae marg. 7 μ ; receptaculi pars basilari 45 × 30 × 12, eius divisiones longiores 250-675 μ.

42. **Rickia Cornuti** Thaxt., Proc. Amer. Acad. 1916, p. 21. 3632

Hab. in Passalo cornuto, Kentucky (Hyatt). — Sporidia 36 × 4 ; perith. 60-75 × 14-18, cellulae marg. 10 μ ; recept. pars basilari 18-27 × 25, ejus divisiones longiores 625 × 12 ; appendices 16-18 × 2,5-3,5, basis appendicis primariae 16-18 × 4,5 (in apice 1,8 μ).

43. **Rickia depauperata** Thaxt., Proc. Amer. Acad. 1916, p. 22. 3633

Hab. in Celaenopsis sp., Hayti (Mann). — Sporidia 18 × 2 ; perithecia 20-28 × 7-9 ; long. tot. ad apicem perithecii 35-40 × 19-23 ; appendices longiores 7 × 3,5.

44. **Rickia dominicensis** Thaxt., Proc. Amer. Acad. 1916, p. 23. 3634

Hab. in antennis Passali speciei majusculae, Dominica — Sporidia 20 × 2 ; perith. 36 × 6 ; pars opaca baseos 26 × 3,5 ; long. tot. ad apicem perithecii 50 μ, ad apicem flagelli 160-190; maxima latitudo 15 μ ; appendices 15-25 × 3.

45. **Rickia parvula** Thaxt., Proc. Amer. Acad. 1916, p. 25. 3635

Hab. in Celaenopsis sp., St. Anns Valley Port of Spain Trinidad. — Sporidia 16 × 2 ; perith. 28 × 9 ; long. tot. ad apicem perithecii 40 × 18 ; basis primariae appendicis 10 × 3,5.

46. **Rickia radiata** Thaxt., Proc. Amer. Acad. 1916, p. 25. 3636

Hab. in Celaenopsis sp., Kamerun. — Sporidia 22 × 2,5 ; perithecia 28 × 11, antheridia 6-7 ; μ appendices longiores 24 × 3,4 ; basis append. primariae 10-12 × 3 ; processus ad cell. basil. 30-55 ; cell. basil. receptaculi 10-15 × 5,5 ; long. tot. ad apicem perithecii

45-55 × 23-28.

47. **Rickia Hypoaspidis** Thaxt., Proc. Amer. Acad. 1916, p. 27. 3637

Hab. in insectis Hypoaspidis sp, Grand Etang Grenada. — Sporidia 18 × 2,5; perith. 35 × 12, cell. marg. 3 μ; appendices 10-12 × 3-4; cellula basil. 10-12 × 4,5-5; long. tot. ad apicem perithecii 55-65 × 16-25.

48. **Rickia Euxesti** Thaxt., Proc. Amer. Acad. 1916, p. 27. 3638

Hab. in insecto Euxesto Parki, Manila Ins. Philipp. — Sporidia 18-20 × 2,5; perith. 26-36 × 16-18; antheridia 18 × 3,5; long. tot. ad apicem perith. 50-90 × 20-26, in parvis exempl. 30 × 15.

49. **Rickia Europsis** Thaxt., Proc. Amer. Acad. 1916, p. 28. 3639

Hab. in insecto Europsis sp., Kamerun. — Sporidia 24 × 3; perith. 40-54 × 16-18; appendices 6-9 × 4; antheridia 7 × 3,5; long. tot. ad apicem perith. 60-66 × 36 43.

50. **Rickia gracilis** Thaxt., Proc. Amer. Acad. 1916, p. 29. 3640

Hab. in insecto Stenotarso guineensi, Kamerun. — Sporidia 35 × 3,6; perith. 75 × 29; antherid. 14 × 4; appendices 10-20 × 3; long. tot. ad apicem perith. 450 × 34; recept. 26 μ.

51. **Rickia danaëalis** Thaxt., Proc. Amer. Acad. 1916, p. 30. 3641

Hab. in variis partibus Danaë senigalensis, Kamerun. — Sporidia 36 × 3,6; perith. 75-95 × 28-32; antherid. 16 × 5-5,5; appendices, inf. 20 μ, super. 65 × 7; appendix primaria 75 μ, basis 18 × 10; long. tot. ad apicem perith. 120-190 × 45-60.

52. **Rickia Scydmaeni** Thaxt., Proc. Amer. Acad. 1916, p. 31. 3642

Hab. in superf. infer. Scydmaeni bicoloris, Kittery Point, Maine Amer. bor. — Sporidia 30 × 3; perith. 18 × 4; appendices 18-22 × 5,5, antherid. 18 × 4; long. tot. ad apicem perithecii 150-160 × 35-38.

53. **Rickia Stenotarsi** Thaxt., Proc. Amer. Acad. 1916, p. 32. 3643

Hab. in elytris Stenotarsi guineensis, Kamerun Afr. occid. — Sporidia 40 × 4; perith. 80-120 × 28-35; antheridia 22 × 4; appendices 22-46 × 4; long. tot. ad apicem perithecii 200-350 × 40-55.

54. **Rickia latior** Thaxt., Proc. Amer. Acad. 1916, p. 33. 3644

Hab. in elytris Stenotarsi guineensis, Kamerun. — Sporidia 38 × 3,8; perith. 80-90 × 27-30; antherid. 9 × 3,6; appendices 18-60 × 3,6; long. tot. ad apicem perithecii 48-70 μ.

55. **Rickia introversa** Thaxt., Proc. Amer. Acad. 1916, p. 34. 3645

Hab. in super. abdominis Copropori lati, Mindanao Ins. Philipp. — Sporidia 18 × 2; perith. 35-40 × 11-13; appendices 6 × 1,5; antheridia 12 × 2.

56. **Rickia nigrofimbriata** Thaxt., Proc. Amer. Acad. 1916, p. 35. 3646
Hab. in apice abdominis Copropori lati, Mindanao Ins. Philipp. — Perith. 38 × 10; appendices 6 × 2,5; long. tot. 80 × 24.

57. **Rickia inclusa** Thaxt., Proc. Amer. Acad. 1916, p. 36. 3647
Hab. in artubus Copropori lati, Mindanao Ins. Philipp.— Sporidia copiosa, 28 × 2,5; perith. 77 × 27; long. tot. ad apicem perithecii 140 × 50.

58. **Rickia circumdata** Thaxt., Proc. Amer. Acad. 1916, p. 37. 3648
Hab. in insecto Episcaphula piciventri, et Episcaphula sp., Kamerun. — Sporidia 28 × 3; perith. 54-64 × 20; appendices 12 × 3; antheridia 10 × 3,5; long. tot. ad apicem perithecii 130-175 × 50-55.

59. **Rickia papuana** Thaxt., Proc. Amer. Ac. 1916, p. 38. 3649
Hab. in insecto Calopsis sp., Nova Guinea Britannica. — Perithecia 75 × 24; antheridia 12 × 4; appendices 20 × 4; long. tota. ad apicem perithecii 235 × 90.

60. **Rickia pallida** Thaxt., Proc. Amer. Acad. 1916, p. 39. 3650
Hab. in insecto Amblyscelis sp., Kamerun. — Sporidia 42 × 4; perith. 15-22 × 5-6; long. tot. ad apicem perith. 200-275 × 60-85.

61. **Rickia Ancylopi** Thaxt., Proc. Amer. Acad. 1916, p. 40. 3651
Hab. in elytris Ancylopi bisignati, Kamerun. — Sporidia 28 × 3; perith. 60-66 × 12-18; appendices 54 × 3,6; antheridia 11 × 4; long. tot. ad apicem perithecii 145-160 × 32-36.

62. **Rickia Episcaphae** Thaxt., Proc. Amer. Acad. 1916, p. 41. 3652
Hab. in insecto Episcapha antennata, Mindanao Ins. Philipp. — Sporidia 50 × 5; perith. 80-100 × 27-30; antheridia 16 × 4; appendices 10-20 × 2; longit. totalis ad apicem perithecii 310-425.

63. **Rickia Eumorphi** Thaxt., Proc. Amer. Acad. 1916, p. 42. 3653
Hab. in insecto Eumorpho cyanescenti, Mindanao Ins. Philipp. — Sporidia 40 × 3,6; perith. 90-100 × 20-24; antheridia 20 × 4; appendices 80-90 × 4; long. tot. ad apicem perithecii 230-400 × 40-55.

64. **Rickia nigrescens** Thaxt., Proc. Amer. Acad. 1916, p. 44. 3654
Hab. in elytris Copropori hypocyploidis, Sarawak, Borneo, Manila Ins. Philipp. — Sporidia 35 × 2,5; antheridia 42 × 4; long. total. ad apicem perithecii 150-190 × 32-35.

65. **Rickia pallescens** Thaxt., Proc. Amer. Acad. 1916, p. 45. 3655
Hab. in artubus Copropori parvae speciei, Manila, Ins. Phi-

lipp. — Sporidia 30 × 2,8; perithecia 68-75 × 18-22; antherida 15 × 4; long. tot. ad apicem perithecii 150-200 × 35-45.

66. **Rickia Circopis** Thaxt., Proc. Amer. Acad. 1916, p. 45. 3656
Hab. in thorace inf. Circopis philippinensis, Kamerun. — Perith. 60-80 × 20-24; appendices 3,5-5,5 × 3,5; antheridia 12 × 3,5; longit. tot. ad apicem perithecii 135-155 × 40-45.

67. **Rickia Episcaphulae** Thaxt., Proc. Amer. Acad. 1916, p. 46. 3657
Hab. in insecto Episcaphula sp., Kamerun.— Perith. 50 × 12-14; appendices 10 × 4; antheridia 12-16 × 4-5; long. tot. ad apicem perithecii 160-180 × 36-40.

68. **Rickia Saulae** Thaxt., Proc. Amer. Acad. 1916, p. 47. 3658
Hab. in insecto Saula sp., Mindanao Ins. Philipp. — Sporidia 28 × 3; perithecia 60-65 × 25-28; long. tot. ad apicem perithecii 150 μ; antheridia 16 × 4.

69. **Rickia Phalacri** Thaxt., Proc. Amer. Acad. 1916, p. 48. 3659
Hab. in elytris Phalacri sp., Manila Ins. Philipp. — Sporidia 28 × 2,5; perith. 58-65 × 16-18; appendices 9-11 × 3,5; long. tot. ad apicem perithecii 135-175 × 18-20.

70. **Rickia sarawakensis** Thaxt., Proc. Amer. Acad. 1916, p. 49. 3660
Hab. in elytris Phalacri (?) sp., Sarawak Borneo. — Sporidia 28 × 2,8; perith. 45 × 19; appendices 10 × 4; antheridia 10 × 3,5; long. totalis ad apicem perithecii 95 × 10-12.

71. **Rickia Parasiti** Thaxt., Proc. Amer. Acad. 1916, p. 49. 3661
Hab. in insecto Parasito sp., Mexico (Mann). — Sporidia 25 × 2,5; perithecia 45-60 × 18-20; appendices 9-11 × 3; cellulae basilares 35 × 9; long. tot. ad apicem perithecii 90-125 × 26-36.

72. **Rickia Gryllotalpae** Thaxt., Proc. Amer. Acad. 1916, p. 50. 3662
Hab. in alis Gryllotalpae sp., in Africa (Mears). — Sporidia 35 × 3; perithecia 75-85 × 24-27; antheridia 15 μ; appendices 12-20 × 7,5; long. tot. ad apicem perithecii 230-325 × 28.

73. **Rickia Lycopodinae** Thaxt., Proc. Amer. Acad. 1916, p. 51. 3663
Hab. in artubus Lycopodinae sp., Madagascar (Walsin).— Perithecia 55 × 24-27; pars libera antheridii 15-20 μ; appendice 7-10 × 5,5; long. tot. ad apicem perithecii 126-156 × 40-45.

74. **Rickia Zirophori** Thaxt., Proc. Amer. Acad. 1916, p. 52. 3664
Hab. in artubus et superf. infer. Zirophori sp., Port Spain et Ariona Trinidad. — Sporidia 35 × 3,5; perithecia 116 × 27; appendices 40 × 4; long. tot. ad apicem perithecii 300-400 × 34-40.

75. **Rickia flagellifera** Thaxt., Proc. Amer. Acad. 1917, p. 652. 3665
Hab. in insecto Leptaulax dentatus, Mindanao, Ins. Phi-

lipp. — Sporidia 20 × 2; perith. 30-36 × 12-14; recept. ad basim flagell. 35-55 × 18-20; long. tot. ad apicem perithecii 55-80; flagellum longius 225 × 5.

76. **Rickia pinnata** Thaxt., Proc. Amer. Acad. 1917, p. 652. 3666

Hab. in insecto Leptaulax dentatus, Mindanao, Ins. Philipp. — Sporidia 45 × 5; perith. 65-75 × 23-27; long. tot. ad apicem perithecii 500 × 20-28.

NYCTEROMYCES Thaxt., Proc Amer. Acad. 1917, p. 653. — Ind. masc. e serie singula superpositarum cellularum constans; pes et cellula basilaris bene evoluta; cellulae minutae numero indefinito, gerentes antheridia composita et duas cellulas superpositas terminales, quarum superior particulariter conformata. Ind. femin. e cellula basilari bene evoluta et minuta cellula subbasilari constans; hac postrema appendicis e cellula pedunc. et altera terminali peculiari formatam gerens. Perithecii pes et cellulae basilares seriis non discretae, partem ascóphoram limitantes. — Sporidia hyalodidyma, cellula ascogena singula.

1. **Nycteromyces streblidinus** Thaxt., l. c. p. 654. 3667

Hab. in abdomine super. et artubus Streblae vespertilionis, in Vespertilionibus, Venezuela (Carriker). — Sporidia 42-45 × 4; perith. cum pede 210-280 × 36-45, apex 35-40 μ; cellula basil. 70-90 × 21, subbasilar. 10 × 18; appendix 18 × 14; cellula pedunc. 4 × 16; long. total. ad apicem perithecii 290-360 μ.

DIANDROMYCES R. Thaxter, Proc. Amer. Ac. of Sc. 54., 1918, p. 208. — Axis receptaculi coincidens cum appendicibus, et ex cellulis superpositis efformatus; tres inferiores receptaculum proprium efformantes; cellula subbasalis duo antheridia symmetrice disposita efformans et duo perithecia gerens; appendices pluricellulares, quarum cellulae inferiores ramos efformant; antheridia e cellula pedicellari et basilari formata, cellulas antheridiales 4-5 gerentes. — Affinis gen. *Dichomyces*, *Monoicomyces*, *Dimeromyces*.

1. **Diandromyces chilenus** R. Thaxter, l. c. — Flavo-brunneus. Longitudo ad apicem perithecii 150-190 μ, perithecium supra cellula pedicellari 90-105 × 30-40; antheridia supra cellula pedicellari 35 μ; receptaculum circa 70 μ; sporae circ. 35 × 3; appendices 225 μ long. 3668

Hab. in Leptoglossa sculpticolli, Corral, Chile America merid.

TETTIGOMYCES Thaxt., Proc. Am. Acad. 1915 p. 20. – Receptaculum ex indefinita serie cellularum superpositarum compositum, cellulae 1-seriatae v. apicali longitrorsum partito; pes majusculus, niger arrhizus; appendix discreta v. mera receptaculi continuatio. Perithecia subindeterminata solitaria v. plura; cellulae parietales 1-pluristratosae; trichogynum ramosum plus minus in basi perithecii persistens; asci 8-spori; sporidia 1-septata cellulae ascogenae 3-plures.

1. **Tettigomyces Gryllotalpae** Thaxt., Proc. Am. Acad. 1915, p. 2. 3669
Hab. in superficie infer. abdominis et in processubus analibus Gryllotalpae africanae, Semarang Java—Perith. 135-310 × 85-62; sporidia 45-50 × 4,5; appendix 40-60 × 25-40; receptaculum 550-1400 × 25-65; longit. total. ad apicem perithecii 235-1560.

2. **Tettigomyces plerophilus** Thaxt., Proc. Amer. Acad. 1915, p. 23. 3670
Hab. in apice alae Gryllotalpae africanae, Samarang Java. — Perith. 125-190 × 25-50; sporidia 45 × 2,5; long. tot. ad apicem appendicis 400-1000 × 20-30.

3. **Tettigomyces indicus** Thaxt., Proc. Am. Acad. 1915, p. 24. 3671
Hab. in corpore Gryllotalpae sp., in India boreali (Scudder). — Perithecia 120 × 44; recept. 100-230 × 20-28; appendix 200-400.

4. **Tettigomyces chaetophilus** Thaxt., Proc. Amer. Acad. 1915, p. 25. 3672
Hab. in antennis abdominalibus Gryllotalpae africanae, Samarang Java. — Perith. 100-120 × 28-35; recept. 40-75 × 30-40; appendix 50-100 μ; longit. tot. ad apicem perithecii 150-200, incluso pede 40 μ.

5. **Tettigomyces galeatus** Thaxt., Proc. Amer. Acad. 1915, p. 26. 3673
Hab. in superf. inf. abdominis Gryllotalpae africanae, Samarang, Java. — Perith. 190-225 × 55-75; recept. 100-140 × 60-80; long. totalis ad apicem perithecii 250-400 μ.

6. **Tettigomyces confusus** Thaxt., Proc. Amer. Acad. 1915, p. 26. 3674
Hab. in antennis abdominalibus Gryllotalpae africanae, Samarang Java. — Perith. 120-200 × 40-60; appendix 40 μ, ramuli ejus 100 × 20; recept. 80-175 × 32-50; longit. total. ad apicem perithecii 230-390 μ.

7. **Tettigomyces brevis** Thaxt., Proc. Amer. Acad. 1915, p. 27. 3675
Hab. in margine inf. abdominis Gryllotalpae africanae, Samarang Java. — Sporidia 50 × 3; perith. 200-450 × 40-60; appendix 40-60, ramuli 120-150; receptac. 25-75 × 40-60; long. tot. 230-550 μ.

8. **Tettigomyces acuminatus** Thaxt., Proc. Amer. Acad. 1915, p. 28. 3676
Hab. in margine dext. infer. abdominis Gryllotalpae africanae, Samarang Java. — Perith. 150-200 × 40-60; sporidia (intra perith.) 40-45 × 3,5; recept. 80-40; long. tot. ad apicem perithecii 250-310 μ.

DICHOMYCES Thaxt. Syll. XI p. 447, XIV p. 727, XVI p. 677.

1. **Dichomyces argentinensis** Speg., Laboulben. Argent. in Anal. Mus. 3677
Nac. Buenos Aires, XXIII p. 283 (1912) fig. 9. — Totus subhyalinus; 250-350 μ altus, cellulis extimis secundi ordinis nigris saepeque paraphysibus etiam fuscis exceptis; peritheciis ordini tertii duobus, utrinque solitariis, quarti vel supremi saepius 4-geminatis, 140-150 × 20.
Hab. in Xantholino agili, La Plata Argentina. — Affinis *D. principi* et *D. vulgato* sed bene distinctus.

2. **Dichomyces gracilis** Thaxt., Proc. Amer. Acad. 1915, p. 29. 3678
Hab. in processu anali Philonth.? sp., Java (RONYER). — Perith. 200-300 × 22-30; recept. ad basim perith. primarii 125-160 μ; appendices 20-25 μ, latitudo major 60-110 μ.

3. **Dichomyces chilensis** R. Thaxter, Proc. Amer. Ac. of Sc. 54., 1918, 3679
p. 210. — Pallide flava et brunneo tincta, dextero latere obscuriori; longitudo ab apice peritheci 175-220 μ; perithecium 75-100 × 22-25; sporae circ. 35 × 3,4.
Hab. plerumque ad apicem abdominis Quedii sp., Corral Chile America austr. — Ab aliis speciebus generis, differt forma asymmetrica, colore et perithecio apice depresse conoideo.

PEYRITSCHIELLA Thaxt. — Syll. IX p. 1130, XI p. 447, XIV p. 726, XVI p. 677.

1. **Peyritschiella subinaequilatera** Speg., Laboulb. Argent. p. 661. *Di-* 3680
chomyces subinaequilaterus Speg., Laboulb. Musei ital. in Anal. Mus. Nac. Buenos Aires XXVI (1915) p. 458 fig. 1. — Totus subhyalinus, corniculo excepto, parvulus, 125-150 μ altus; cellula basali subcylindrica, praebasalibus ternis, marginalibus cuneatis, antepraebasalibus quinis, marginalibus latere altero juxtapositis, cuneatis, corniculum atrum sustinentibus, opposito latere superpositis atque in appendice 6-7-mera, sensim sursum attenuata productis, supremis receptaculi, centralibus ternis perithecium fulcentibus, lateralibus nonnullis utrinque additis paraphyses filiformes basi nigro-annulatas, 20-22 × 1,5-2 sustinentibus; peritheciis solitariis, ex elliptico

cylindraceis 60-65 × 20-22, apice obtuse umbonato-ostiolatis, plane exappendiculatis.

Hab. in Philontho holomallo, Arr-amba, Scioa, Afr. or. — *P. anisopleurae* Speg. affinis sed bene distincta.

2. **Peyritschiella anisopleura** Speg., Laboulb. argent. p. 661 fig. 188. 3681
Dichomyces anisopleurus Speg. Laboulb. ital. II, in Anal. Mus. Nac. Buenos Aires XXVII (1915) p. 48 fig. 15. — Parvulus, 125-150 μ altus; receptaculo pallido, elongato, angusto, 90-100 × 25-35, cellula basali simplici cylindracea, subbasalibus binis, altera subcylindracea altera breviore obconica, praesubbasalibus quinis, tribus longioribus duobus latero-ventralibus valde minoribus et cornu infuscatulum sustinentibus; serie autem suprema latere cornuto abortiva brevissima, latere altero longe producta, sursum arcuata, 8-9-cellulari, cellulis tribus centralibus, altera transversa interposita, perithecium fulcentibus, ceteris lateralibus paraphysibus filiformibus, erectis, 50 × 4-5, basi psallio nigro ornatis armatis: perithecio atro, subopaco, ellipsoideo-cylindraceo, 65-75 × 22-25, superne subconoideo, modice attenuato, ostiolo brevi, obtuso, levi, coronato.

Hab. in Philontho sp. ind., in Italia, Abyssinia, Argentina.

CHITONOMYCES Peyr. — Syll. VIII p. 914, XIV p. 727, XVI p. 678 XXII p. 8.

1. **Chitonomyces aculeiferus** Speg., Laboulb. ital. II, in Anal. Mus. 3682
Nac. Buenos Aires, XXVII (1915) p. 44 fig. 9. — Parvus, 140-160 μ altus, totus pallidissime melleus, cellula basali turbinata, secunda subsegmentoidea; androsticho recto, abbreviato, exappendiculato; perithecio 75 × 35, ventre valide convexo, dorso subrecto, ostiolo retuso, labio antico acuto brevi, postico in aculeo gracili, subrecto, 50 × 7-8 producto.

Hab. in Laccophilo virescente, Lago di Tarzo, Venet., Ital. bor.

2. **Chitonomyces Thaxteri** Speg., Las Laboulb. Argent. 1917, p. 480. 3683
Chytonomyces elongatus Thaxt., Proc. Amer. Acad. 1916, p. 13 (non Speg., II Contr. Laboulb. it. 1915).

Hab. in apice elytrae dexterae Lenophili sp., Sangre Grande Trinidad. — Sporidia 40 × 2,5; perithecia 86-100 × 10-12; long. tot. ad apicem perithecii 120-155 × 12-16.

3. **Chitonomyces elongatus** Speg., Laboulb. ital. II, in Anal. Mus. Nac. 3684
Buenos Aires XXVII (1915) p. 44 fig. 10. — Elongatus, gracilis, 600-650 μ altus, totus pallidissime melleus, cellula basali cylindrica,

pedicelliformi, 200 × 18-20, saepius spiraliter torta, secunda brevi subcuboidea; androsticho recto, in appendice cylindracea, recta, perithecium duplo superante, 200 × 18-20 producto; perithecio subellipsoideo 18 × 50, androsticho fere toto adnato, umbone subconoideo, ostiolo minuto, labio supero subcylindraceo breviter elongato donato coronato.

Hab. in Laccophilo sp., Lago di Tarzo, Venet., Ital. bor.

4. **Chitonomyces ensiferus** Speg., Laboulb. ital. II, in Anal. Mus. Nac. Buenos Aires XXVII (1915) p. 45 fig. 11. — Parvus, 110-115 μ altus, pallide rufescens, cellulis basali et praebasali pallidioribus; androstichi cellula secunda triangulari; perithecio subcylindraceo, 65 × 30, ventre ad medium appendice cultriformi 35 × 8 armato, ostiolo antrorsum curvulo. 3685

Hab. in Laccophilo virescente, prope Coneglanum, Ital. bor. — Affinis *Ch. appendiculati* Thaxt. et *Ch. borcali* Thaxt. sed bene distincta species.

5. **Chitonomyces italicus** Speg., Laboulb. ital. II, in Anal. Mus. Nac. Buenos Aires XXVII (1915) p. 46 fig. 12. — Parvus 125-150 μ alto, cellula basali hyalina, praebasali gynosticho atque androsticho primo obscure melleis serius saepe nigro-opacis, caetero piceo subpellucido; perithecio subellipsoideo 75-80 × 30-40, ventre valide convexo, dorso subrecto appendice corniformi, curvula, apice furcata, 35-40 × 6-8, nigra armato. 3686

Hab. in Laccophilo obscuro?, prope Coneglanum, Ital. bor. — Affinis *Ch. melanuro*, ad genus *Autoicomyces* characteribus quibusdam vergens.

6. **Chitonomyces truncatus** Speg., Laboulb. ital. II, in Anal. Mus. Nac. Buenos Aires XXVII (1915) p. 47 fig. 14. — Parvus, 175-185 μ altus, 75-80 μ crassus, totus obscure melleus; cellula basali pallidiore; androsticho recto, obtuso, abbreviato, corniculo axillari per aetatem saepe nigrescente; perithecio late ovato, 110 × 50, superne oblique truncato, minute trilobulato. 3687

Hab. in Laccophilo sp. ind., prope Romam et prope Coneglanum in Italia. — Affinis *Ch. paradoxo* (Peyr.) Thxt. a quo differt ob defectum cornui ostiolaris et staturam minorem.

7. **Chitonomyces Bruchi** Speg., Laboulb. Arg. p. 479, fig. 22. — Parvus, pallide melleus, cellulis basali et praebasali confluentibus, latere ventrali convexo, dorsali subrecto verticali, sub ostiolo acuto introrso setula longiuscula gracili plus minusve sigmoidea dorso armatus. 3688

Hab. in elytrarum margine Haliplí Bruchi, Rosario de Santa Fe, Argent. — Magn. tot. 85-100 × 30-35; perith. 50-60 × 25.

8. **Chitonomyces argentinensis** Speg., Lab. Arg. p. 479 fig. 21. — Mediocris, clavulatus, cellula basali fere tota nigra, ceterum pallide melleus, perithecio clavulato obtuso ostiolo praelongo cylindraceo arcuato v. subrecto primo hyalino dein nigro opaco abrupte terminato. 3689

Hab. in elytrarum margine Canthydri debilis, La Plata Arg. — Alt. tot. 250; perith. 50-55 × 20-22 (sine ped.).

9. **Chitonomyces cerviculatus** Thaxt., Proc. Amer. Acad. 1916, p. 5. 3690

Hab. in elytra dext. Laccophili sp., Grenada et Trinidad. — Sporidia 36 × 2,5; perith. 45-50 × 18, rostr. 35 × 12; long. tot. ad apicem perithecii 90-100 × 23-27.

10. **Chitonomyces introversus** Thaxt., Proc. Am. Acad. 1916, p. 7. 3691

Hab. in artubus poster. Laccophili, Grand Etang Grenada. Sporidia 36 × 3,6; perith. pars ventr. 54-60 × 27-32; long. tot. 80-95 μ.

11. **Chitonomyces Oedipus** Thaxt., Proc. Amer. Acad. 1916, p. 7. 3692

Hab. in artubus poster. Laccophili sp. Sangre Grande Trinidad et Grand Etang Grenada. — Sporidia 40 × 4; perithecia 72 × 30, spina ext. 21-26 μ, interna 45-55 μ; long. tot. ad apicem perithecii 100-120 × 35.

12. **Chitonomyces Grenadae** Thaxt., Proc. Amer. Acad. 1916, p. 7. 3693

Hab. in margine elytrae dext. Laccophili sp., Grand Etang Grenada. — Sporidia 36 × 2; perithecia 55-60 × 14; long. tot. ad apicem perithecii 70-75 × 20-22.

13. **Chitonomyces uncinulatus** Thaxt., Proc. Amer. Acad. 1916, p. 8. 3694

Hab. in margine elytrae dext., Laccophili sp., Sangre Grande Trinidad. — Sporidia 3,2 × 5; perith. 72 × 18; ejus appendix 24-30 × 3,5; long. tot. ad apicem perith. 100-120 × 27.

14. **Chitonomyces manubriolatus** Thaxt., Proc. Amer. Acad. 1916, p. 9. 3695

Hab. in artubus poster. Laccophili sp., Sangre Grande Trinidad, Grand Etang Grenada — Sporidia 40 × 3,5; perith. 75-85 × 27, ejus appendix 45 × 11; long. tot. ad apicem perithecii 125-145 × 40-45.

15. **Chitonomyces helicoferus** Thaxt., Proc. Amer. Acad. 1916, p. 10. 3696

Hab. in margine elytrae Laccophili sp., Sangre Grande Trinidad. — Sporidia 25 × 2; perithecia 54-60 × 12,6; processus anterior 14 × 5, posterior 18-18; long. tot. ad apicem perith. 100 × 19.

16. **Chitonomyces bicolor** Thaxt., Proc. Amer. Acad. 1916, p. 11. 3697

Hab. in margine exter. elytrae sinistr. Laccophili sp., Sangre Grande Trinidad et Grand Etang Grenada. — Sporidia 24 × 2; perith. 60-80 × 12-14; long. tot. ad apicem perithecii 100-125 μ.

17. **Chitonomyces seticola** Thaxt., Proc. Amer. Acad. 1916, p. 11. 3698

Hab. in elytra sinistra Laccophili sp., Grand Etang Grenada. — Sporidia 25 × 2; perith. 50-60 × 6.

18. **Chitonomyces striatus** Thaxt., Proc. Amer. Acad. 1916, p. 12. 3699

Hab. in prothorace super. Laccophili sp., Grand Etang Grenada. — Sporidia 20 × 15; perith. 45-50 × 10; appendix 9-10 × 2-2,5; long. total. ad apicem perithecii 75-80 × 16-17.

19. **Chitonomyces longirostratus** Thaxt., Proc. Amer. Acad. 1916, p. 14. 3700

Hab. in margine externo elytrae dexterae Laccophili sp., Sangre Grande Trinidad. — Sporidia 30 × 2; perith. venter 65-78 × 18-20, apex 245-260 × 8-11; long. tot. ad apicem perithecii 140-156 μ.

20. **Chitonomyces inflatus** Thaxt., Proc. Amer. Acad, 1916, p. 15. 3701

Hab. in artubus antherioribus parvi insect. ex Dityscidis; Manila Ins. Philipp. (Banks). — Sporidia 40 × 2,5; perith. 75 × 25; longit. tot. ad apicem perithecii 100-120 × 26-30.

21. **Chitonomyces excavatus** Thaxt., Proc. Amer. Acad. 1916, p. 15. 3702

Hab. in margine elytrae dexter. insecti parvi ex Dityscidis, Manila Ins. Philipp. (Banks). - Sporidia 45 × 2,5; perith. 70 × 20, excl. processu dentiformi (11 × 18 × 22); long. tot. ad apicem perithecii 120-150 × 30-35.

HYDRAEOMYCES Thaxt. — Syll. XIV p. 727.

1. **Hydraeomyces venetus** Speg., Laboulb. ital. II, in Anal. Mus. Nac. 3703 Buenos Aires XXVII (1915) p. 52 fig. 17. — Parvulus 125 μ circ. altus, pallide melleus, cellulis secunda et tertia receptaculi nec non parte infera androstichi vix obscurioribus; perithecio cylindraceo-subellipsoideo, 70 × 35, ostiolo eximie prominulo brevi vix subbilabiato coronato.

Hab. in Halipli spec. indet. prope Coneglanum Venet., et prope Romam. — *Hyd. Halipli* Thaxt. affinis sed distinctus.

PARAHYDRAEOMYCES Speg., Laboulb. ital. II, in Anal. Mus. Nac. Buenos Aires XXVII (1915) p. 70 (Etym. *para* proximum et *Hydraeomyces*). — Habitu et fabrica generis *Hydraeomyces* Thaxt. sed receptaculo quadri-cellulari.

1. **Parahydraeomyces italicus** Speg., loc. cit., fig. 35. — Totus fusco- 3704 melleus, 125-180 μ altus; receptaculo vix turbinato, cellulis recep-

taculi tribus superis nec non androstichi parte dimidia infera obscurioribus; perithecio late ellipsoideo, 80 × 40, subaequilaterali, ostiolo vix prominulo.

Hab. in Haliplo striaticolli prope Romam, Ital. centr.— * **neapolitanus** Speg., loc. cit. p. 70 fig. 36. — A typo recedit statura paulo minore, 125-150 μ, receptaculo eximie obconoideo, cellula basali omnino hyalina, perithecio minus regulari, 60-65 × 30-25.—

Hab. in Haliplı sp. indet., Neapolim, Ital. merid.

MONOICOMYCES Thaxt. — Syll. XI p. 675, XVII p. 915, XXII p. 9.

1. **Monoicomyces affinis** Speg., Laboulb. ital. II, in Anal. Mus. Nac. Buenos Aires XXVII p. 65 (1915) fig. 31. — Parvulus, 125-150 μ altus; totus subhyalinus receptaculo 5-mero, cellula basali obconica parvula, ceteris superpositis majoribus oblique connatis, tribus inferis sterilibus et paraphysiferis, suprema e latere externo perithecigera apiceque antheridifera; antheridio panduriformi, sessili, 25 × 12, apice longe inaequaliterque biflagellato; perithecio pedicello unicellulari plus minusve elongato fulto, elliptico-elongato, 50-75 × 22-25, modice crasse obtuseque ostiolato. 3705

Hab. in Staphilinide minuto indeterm., Coneglanum, Ven., Ital. bor. — Affinis *M. argentinensi* Speg. nec non *M. papuano* Thaxt., *M. californico* Thaxt. et *M. invisibili* Thaxt., quae omnes potius formae ejusdem speciei videntur.

2. **Monoicomyces ternatus** Speg., Laboulb. ital. II, in Anal. Mus. Nac. Buenos Aires XXVII p. 67 (1915) fig. 32. — Parvulus, 200 μ altus; luteolus receptaculo parvo, unicellulari, axi trimero, cellulis inferis nigris, suprema subhyalina, aparaphysato coronato, verticillatim ad collum genitalia terna proferente; genitalibus cellulae communis apice insidentibus; antheridiis inferis, subhorizontalibus, clavulatis, 60 × 25, sessilibus, apice 2-4-appendiculatis, appendicibus 120 × 10-12; peritheciis superis, pedicellatis, late ovato-ellipsoideis, 100 × 50 (sine pedicello). 3706

Hab. in Staphilinide minuto mycophilo indet. prope Coneglanum, Ven., Ital. bor. — Affinis *M. britannici* Thaxt. sed appendicibus antheridialibus facile dignoscendus.

3. **Monoicomyces unilateralis** Speg., Laboulb. ital. II, in Anal. Mus. Nac. Buenos Aires XXVII p. 68 (1915) fig. 33. — Parvulus, 150 μ altus, melleus; receptaculo minuto 1-cellulare, cellulis 2 vel 3 nigris, opacis, histmis hyalinis separatis coronato, utrinque super unguem antheridium clavatum, 45-50 × 18, exappendiculatum, sessile 3707

succubum et perithecium incubum, ovoideo-elongatum, 50-60 × 20, breviter pedicellatum proferente; paraphysibus paucis, e latere interno cellulae secundae appendicularis exsurgentibus, monostichis, hyalinis, parum elongatis, 100 μ circ. longis.

Hab. in Staphilinide minuto mycophilo, prope Coneglanum, Ven., Ital. bor. — Affinis *M. britannici* Thaxt. sed bene distinctus.

4. **Monoicomyces venetus** Speg., Laboulb. ital. II, in Anal. Mus. Nac. Buenos Aires XXVII (1915) p. 69 fig. 34. — Parvulus, 175-200 μ altus, fusco-melleus; receptaculo minuto, unicellulari, 50 μ alto, cellulis duobus subconoideis non nigrefactis coronato; ramis fertilibus binis oppositis, brevissimis; antheridio (in quoque ramo) clavato, subsessile, 40 × 20, exappendiculato; perithecio (in quoque ramo) conoideo-lanceolato, 75 × 35, lineis obscurioribus 4 spiraliter notato, pedicello gracili, hyalino, 25 × 10 fulto. 3708

Hab. in Staphilinide minuto indeterm. (Atheta sp.?), Coneglanum, Ven., Ital. bor.

5. **Monoicomyces zealandicus** Thaxt., Proc. Amer. Ac. of Sc. 54., 1918, p. 214. — Crassa, rudis, plerumque symmetrica; cellula basilari minuta brunnea, subbasali parva hyalina aegre visibili. Peritheciis 50-60 × 20-22, cellula pedicellari 18-25 × 10; antheridiis 35 × 16, appendicibus longis, 32 × 5; totus fungus 95-108 μ long. maxima lat. 40-50 μ. 3709

Hab. in abdomine Athetae (Acrotona) Fungi, Auckland Nova Zelandia. — *M. nigrescenti* quoad forma et colore proxima.

6. **Monoicomyces Ocaleae** Speg., Laboulb. Arg. p. 660 fig. 187. — Primo toto pallide melleo, basibus nigricantibus pedicellorum perithecialium exceptis, serius plus minusve stramineo fumoso praecipue in receptaculis secundariis, peritheciis nec non antheridiis; appendice primaria breviuscula 3-mera attenuato-conoidea obtusiuscula semper simplice. 3710

Hab. in abdomine Ocaleae funebris, Sta Catalina B. A. et La Plata Argent. — Perith. 85-95 × 35-40 sine ped.; anther. 80 × 30; sporidia 32 × 3.

7. **Monoicomyces infuscatus** Speg., Laboulb. Argent. in Anal. Mus. Nac. Buenos Aires XXIII (1912) p. 192, fig. 19. — Axi primario antheridiisque atris; peritheciis subhyalinis vel pallidis, longe pedicellatis, 90 × 25; appendicibus antheridiorum quaternis fasciculatis, sat elongatis, hyalinis vel fuscis.— Totus fungus 180-200 μ altus. 3711

Hab. in Xantholino gracili, La Plata, Argentina.

8. **Monoicomyces Homalotae** Thaxt. — Syll. XVI p. 675 — var. **Geostibae** Maire Bull. Soc. Hist. Nat. Afrique du Nord t. VII, 1916, p. 8, tab. II fig. 14-22. — A typo differt peritheciis longius pedicellatis, ellipsoideo-oblongis, nec non antheridiorum appendicibus obsoletis v. coalitis. 3712

Hab. in Geostiba Peyerimhoffii, Chiffa « Ruisseau des Singes », Algeria (De Borde).

9. **Monoicomyces Caloderae** Thaxt., Proc. Amer. Acad. 1912, p. 162. 3713

Hab. in abdomine Caloderae sp. Palermo, Temperley et Llavallol Argent. — Sporidia 38 × 4; perith. inclusa cellula basil. 80-90 × 30-35; cellula pedunc. 25 × 12; receptac. 25 × 20; append. primaria 150-175 μ; ceterae 75-100 μ; antherid. 90 × 35.

10. **Monoicomyces Leptotrachelae** Thaxt., Proc. Amer. Acad. 1915 p. 30. 3714

Hab. in abdomine Leptotrachelae javanae, Samaranga Java. — Perith. 75-110 × 20-27; antheridium 40 × 12, ramuli 40 × 5; longit. totalis ad apicem perithecii 185 μ.

11. **Monoicomyces Stenussae** Thaxt., Proc. Amer. Acad. 1915, p. 30. 3715

Hab. in partibus variis Stenussae ceylonicae, Samarang Java. — Perithecia longiora, incl. cellulis basil. 135 × 34, pes 40 × 12; antherid. 58 × 9; long. total. ad apicem perithecii 200 μ.

12. **Monoicomyces Amauroderae** Thaxt., Proc. Amer. Acad. 1915, p. 31. 3716

Hab. in infer. abdomine et thorace Amauroderae Kraepelini, Samarang Java. — Perith. cellul. pedunc. 156-275 × 20; cell. basil. 55-65 × 20-28; corpus 118 × 20-25; sporidia 30 × 4: antheridia 62-82 × 18-20; receptac. 32 μ; append. primaria 125-175 × 10-15; appendices antheridiales 40-150 × 8.

13. **Monoicomyces denticulatus** Thaxt., Proc. Amer. Acad. 1915, p. 32. 3717

Hab. ad apicem abdominis Homalotae nigrescentis, Samarang Java. — Processus dentiformis 18 × 10; perith. 125-134 × 40; pes 40-45; antheridia 65 × 24; appendix primaria 24 × 12; recept., excl. pede, 24 μ; long. tot. ad apicem perithecii 215, incl. pede.

EUMONOICOMYCES Thaxt. — Syll. XVI p. 675.

1. **Eumonoicomyces argentinensis** Speg., Laboulb. Argent. in Anal. Mus. Nac. Buenes Aires XXIII p. 188 (1912) fig. 15. — Totus subhyalinus, 250-500 μ altus; cellulis receptaculi tristiche geminatis, inferis sterilibus, mediis masculis, superis foemineis; peritheciis ovato-acutatis, longe pedicellatis, 130-170 × 30-50. 3718

Hab. in Platysteto fallace, La Plata, Argentina.

MIMEOMYCES Thaxt., Proc. Amer. Acad. 1912, p. 163. — Receptaculum ex binis cellulis superpositis compositum; cellula super. apice singulam appendicem et cellulam pedunc. singuli perithecii gerens; appendix costans ex cellula basilari et ex cellulis pluribus superpositis; in cujus latere formantur antheridia composita varia; cellula superior gerit ramulos steriles. Antheridia costant e cellulis similaribus antheridialibus circ. senis; perithecia pedunculata normalia.

1. **Mimeomyces decipiens** Thaxt., l. c. p. 164. 3719

Hab. in artubus et abdomine Quediis sorecocephali n. sp., Llavallol Argent. — Perith. 55-65 × 24 (pars sporogen.), 55-65 × 24, incl. basi et pede 75-95; appendix primaria 50-55, ramuli ejus longiores 60 μ; receptac. 50-70; long. tot. ad apicem perith. 125-150; sporidia 30 × 2,5.

CANTHAROMYCES Thaxt. — Syll. IX p. 1131, XI p. 446, XIV p. 725 XVI p. 676.

1. **Cantharomyces Ancyrophori** Picard, Bull. Scient. France Belgique t. 50., 1916-1917, p. 444, tab. VI fig. 1. — Flavo-melleus pedunculo perithecii pallidiore; receptaculo bicellulare, cellula basali parva subquadrata, subbasali majori parum longiore quam latiore; appendicibus plerumque 3-cellularibus 2. longiore et antheridifera, apice seu cellula 3. ramulis 1-2 angustioribus multiseptatis praedita, 220-310 μ long. perithecio conoideo v. piriformi basi rotundato apicem versus sensim attenuato, 140-150 μ long. pedunculo pallide flavo, elongato quandoque plus minus abbreviato. 3720

Hab. in Ancyrophoro flexuoso, St. Antonio (Tarn-et-Garonne) Gallia (LAVAGNE). — *Ch. Platystheti* et *occidentali* praecipue affinis.

2. **Cantharomyces orientalis** Speg., Laboulb. ital. II, in Anal. Mus. Nac. Buenos Aires XXVII (1915) p. 43 fig. 7. — Submediocris, 180-200 μ altus, pallide mellus; receptaculo dimero, cellulis parvis; androsticho 4-mero, in cauda subhyalina, simplici, 80-100 × 10-12, inferne papillulosa producto, cellula secunda caeteris majore; perithecio elliptico-ovato, sursum sensim attenuato, 75-80 × 25-30, grosse umbonato-ostiolato, pedicello unicellulari subhyalino longiore fulto. 3721

Hab. in Staphilinide quodam (Quaedius?) prope Coneglanum, Ven., Ital. bor.

3. **Cantharomyces venetus** Speg., Laboulb. ital. II in Anal. Mus. Nac. 3722

Buenos Aires XXVII (1915) p. 43 fig. 8. — Mediocris, 200-250 μ altus, melleus; receptaculo dimero, cellulis parvis; androsticho 5-6-cellulare, cellula infima sessili inermi, secunda fertili saepe inermi quoque, ceteris sensim decrescentibus, ciliis rigidis erectis simplicibus armatis; perithecio elliptico-ovato, 140-150 × 50-55, grosse longiusculeque umbonato-ostiolato, pedicello unicellulari pallidiore subaequilongo fulto.

Hab. in Staphilinide quodam minuto, atro, prope Conegianum, Ven., Ital. bor.

4. **Cantharomyces Magellanicus** Thaxter., Proc. Amer. Ac. of Sc. 54, 1918, p. 213. — Cellula basilari subhyalina, duplo longa quam lata supra leniter constricta. Peritheciis, cellula basilari inclusa, circ. 100 × 40 pedicello 120 × 15; appendicibus circ. 70 μ, cellula pedicellari 28 × 18, segmento antheridiali 22 × 20; cellula basilari receptaculi 16 × 8, cellula subbasali 14 × 25. Totus fungus ad apicem perithecii circ. 225 μ longus. 3723

Hab. in parvo flavido Staphylinide, Aleocharide, Punta Arenas Magellano, Chili America austr. — Forma receptaculi, longitudine pedicelli et apice perithecii prominente distincta.

5. **Cantharomyces Trogophloei** Speg., Lab. Arg. in An. H. N. Buenos Air. XXIX (1917) p. 470, fig. 12. — Parvus pallide fumosus, ad septum primum geniculatus cellula subbasali latere dorsali plus minusve crasse nigro-marginata; cellula infima androstichi minore sterili, supera paulo majore fertili superne septo crasso nigro coronata; appendice 2-5 mera, articulis 1-3 basalibus laminaribus septis validiusculis, nigris limitatis, suprema lageniformi majuscula; gynosticho bicellulari, cellula infera depresso-subglobulosa parva supera turbinata majore, perithecio ovato recto v. parum inaequilaterali. ostiolo obtuso mediocri pallidiore coronato, cellulis basilaribus eximie evolutis. 3724

Hab. in toto corpore Trogophloei tenuipuncti, in ins. Santiago La Plata, Argent. — Alt. tot. 125-150 μ, perith. 60-75 × 30-35.

6. **Cantharomyces Valdivianus** Thaxter., Proc. Amer. Ac. of Sc. 54., 1918, p. 212. — Cellula basilari receptaculi incurvata, subhyalina v. brunneola cellula superiori pro parte brunneo-translucenti; supra longe obconoidea v. cornucopiaeoidea. Peritheciis 55-70 × 18-20, pedicello e regione basali circ. 50 × 18; sporis 39 × 3; axis appendicum 50-70, ramis terminalibus longioribus 42 × 7; segmento antheridiali 17 × 19; totus fungus ad apicem perithecii 125-175 μ long.; 3725

receptaculo 60 × 28, basi 8 μ, cellula subbasali circ. 50 μ longa.

Hab. in Trogophloeo sp., Corral Chile, America austr. — Ab aliis in Trogophloeo viventibus differt statura majore. Cum *C. Trogophloei* Speg. magis convenit sed differt cellula basilari elongata opaca et caracteribus appendicum.

7. **Cantharomyces Chilensis** Thaxter, Proc. Amer. Ac. of Sc., 54., 1918, p. 212. — Inaequaliter obscure brunneo fumoso tinctus, cellula basilari et pedunculo perithecii pallidiori. Peritheciis circ. 70 × 30, pedunculo et cellula basali 35-42 × 20, sporis circ. 28 × 3,5; appendicibus e apice ramulorum circ. 65 μ long., axis cellula pedicellari inclusa 35-42 × 18; receptaculo pede incluso, 32 × 20; totus fungus e apice perithecii 110-130 μ long. 3726

Hab. in Trogophloeo sp., Baños de Apoquindo Chile, America astr. — *C. Andino* proximum sed differt statura, colore et praecipue caracteribus appendicum.

8. **Cantharomyces Andinus** Thaxter, Proc. Amer. Ac. of Sc., 54., 1918, p. 210. — Brunneo-flava, cellula basali et pedicellari subhyalina; longitudo ad apicem perithecii 90-112 μ; perithecium 45-50 × 20-22; regio cellulae basalis et pedicellaris 28 × 18; axis appendicum cellula pedicellari inclusa, 35-40 × 15; appendices longiores 30 × 6, receptaculum cum pede 30-34 × 18. 3727

Hab. in Trogophloeo sp., Baños de Apoquindo prope Santjago Chile America Austr. — Proxima *C. Trogophloei* Speg. et *C. pusilla* a quibus et aliis in Trogophloeo viventibus differt cellulis axialibus appendicum supra segmentum antheridialem depressis.

9. **Cantharomyces abbreviatus** R. Maire, Bull. Soc. Hist. Nat. Afrique du Nord, t. 11., 1920, Extr. p. 11, tab. I fig. 5-7. — Rufo-brunneus, pellucidus, parvus; receptaculi, cellula basali obconica, cellula subbasali paulo majore, subquadrata, appendicem masculam et perithecii pedicellum gerenti. Appendicis masculae cellula secunda antheridifera, cellula prima subapplanata, cellulis distalibus 1-3, brevibus nec discoideis, cellula apicali subhyalina subglobosa v. elongata, rarius in filamentum brevem producta. Antheridio composito multicellulari externo. Perithecio lageniformi, symmetrico, in rostrum obtusum attenuato; ostiolo subhyalino; perithecii pedicello brevi; cellulis basalibus superioribus parvis subtriangularibus, inferiore subcylindrica. Totus fung. 90-115 μ alt. 3728

Hab. in Trogophloeo corticino Grav., prope Hipponem Reg. Numidiae, Africa bor.

10. **Cantharomyces numidicus** R. Maire, Bull. Soc. Hist. Nat. Afrique 3729

du Nord., t. 11., 1920, Extr. p. 12, fig. 3. — Receptaculo bicellulari, cellula basali parvula, praeter unguem subhyalina; septo primo valde obliquo; cellula subbasali obconica, basali subtriplo majore, basi extus hyalino-gibbosa, fere tota nigro-suffusa, appendicem masculam apicalem et gynostichum sublateralem gerenti. Appendice mascula rufo-brunnea pellucida, dolioliformi, e pedicello unicellulari, antheridio et ramis apicalibus sterilibus mox collapsis constituta; pedicello brevi, latissimo, crassissime tunicato; antheridio subgloboso, ad septum apicalem nigro-suffuso e cellula interiore et cellula superiore-interiore magnis indivisis, et cellulis exterioribus permultis parvulis constituto; perithecii pedicello breviusculo, subcylindrico, subincurvato cum perithecii cellula basali inferiore longiuscula, subcylindrica, subhyalina, concrescenti; perithecio juniori dilute melleo, lageniformi, apice in rostrum cylindricum subretusum abrupte contracto. — Totus fungus 153 µ alt.

Hab. in Trogophloeo Mannerheimi Kolen, in Numidia, Africa bor.

11. **Cantharomyces italicus** Speg., Laboulb. ital. II, in Anal. Mus. Nac. Buenos Aires XXVII (1915) p. 42 fig. 6. — Parvulus, 125 µ altus, totus pallide melleus; receptaculo 2-cellulari, cellula praebasali sat turgida, e latere gynostichum fulcente, superne androsticho 1-mero, cellula antheridifera 25 × 12 in flagello 3-4 articulato producta coronato; stipite peritheciali saepius monomero omnino libero, perithecio subellipsoideo breviter crasse obtuseque attenuato-ostiolato, 75 × 23-25. 3730

Hab. in Dryoptide (Parno) algirico, prope Coneglanum, Ital. bor. — Affinis *C. Bruchii* Speg. et *C. Bordei* Pic.

12. **Cantharomyces Thaxteri** Maire, Bull. Soc. Hist. Nat. Afrique du Nord, t. VII, 1916, p. 100, cum icon. — Pede atro excepto flavomelleus; receptaculo bicellulari, brevi; appendice antheridifera unica, e cellulis 2-3 subisodiametricis et ramis fasciculatis constante. Antheridio in appendicis cellula secunda evoluto, composito, introrso; appendicis ramis cellula secunda evoluto, composito, introrso; appendicis ramis perithecium superantibus, incrustatis, mox ruptis et collabescentibus. Peritheciis rarius 2. Perithecio saepius unico, subconico, subsymmetrico, pede unicellulari plus minusve elongato et cellulis basalibus 3 minoribus suffulto. Ascosporis ad $^1/_4$ inferiorem septatis, fusiformibus, utrinque acutis, muco obvolutis, 25 × 2,7. — Alt. a pede usque ad ostiolum: 110-135 µ; perithecium: 60-62 × 23-26; appendicis long. usque ad 150 µ. 3731

Hab. in membris Trogophlœi dilatati Er. in Galloprovincia (P. DE PEYERIMHOFF).

13. **Cantharomyces Bordei** Picard, Bull. Soc. Mycol. 1913 p. 516 fig. 5. — 3732
Receptaculo ex duobus cellulis efformato subbasali majori; peritheciis subconoideo-piriformibus, 100 × 48-50, pedicello unicellulari brevissimo praedito; appendice e cellula subbasali orta, supra antheridium ferenti antheridio apice duobus cellulis praedito, cellula inf. brevi lata superiori elongata cylindracea et cum praecedenti appendicem 45 μ longam efformantibus; totus fungus e basi usque ad apicem perithecii 160 μ long. usque ad apicem appendicis 160 μ. — Colore flavo-pallido, cellula basali appendicis obscuriore, cellulis terminalibus appendicis hyalinis

Hab. in Limnicho sericeo, Biskra Algeria (M. DE BORDE).

14. **Cantharomyces Bruchi** Speg., Laboulb. Argent. in Anal. Mus. Nac. 3733
Buenos Aires XXIII p. 179 (1912) c. ic. — Parvulus, totus pallide melleus; receptaculo bicellulari, cellula supera e latere perithecium stipitatum fulcenti, superne in flagello 10-12-articulato producta, cellula secunda (an etiam tertia basali?) flagelli antheridifera. Alt. 200-240 μ, perith. 100-110 × 35-40, flagell. 300 μ longo.

Hab. in Parno corpulento, prov. Buenos Aires, Argentina.

15. **Cantharomyces permasculus** Thaxt., Proc. Amer. Acad. 1912, p. 165. 3734
Hab. in Parni specie majuscula, imprimis in elytris, Palermo Argent. et Plenomi pubescentis, La Plata (SPEG.) — Perith. 135-160 × 40-50; cellula pedunc. 45-60 μ; sporidia 70-75 × 4; receptac. 100-155 × 40; appendix primaria 200-255, rami longioris 250; long. total. ad apicem perithecii 275-375 μ. — Teste cl. Spegazz. Lab. Argent. n. 11, haec species non differt a *C. Bruchi* Speg.

16. **Cantharomyces platensis** Thaxt., Proc. Amer. Acad. 1912, p. 166, 3735
Speg., Lab. Arg. fig. 12.

Hab. in elytris minutae speciei Parni (?), Palermo Argent. et Pelonomi simplicis, Santiago La Plata (SPEG.). — Perith. 125-150 × 32-44, cellula pedunc. 135-235 × 25-35; sporidia 60 × 4; receptacul. 60-75 × 35-40; appendix primaria 110-135 μ, rami longioris 200 μ; long. total. ad apicem perith. circ. 400 μ.

HERPOMYCES Thaxt. — Syll. XVII p. 915, XXII p. 10.

1. **Herpomyces macropus** Speg., Laboulb. Arg. p. 548 fig. 91. — H. pa- 3736
ranensis Thaxt. proximus, sed masculus receptaculo androstichoque majoribus et fabrica omnino aliena recedens; foemineus autem pe-

rithecio nonnihil majore in stipite graciliore conspicue longiore abrupte contracto, thallo angustiore atque minus expanso distinctus.

Hab. in antennis B l a b e r a e ? sp. permagnae, Oràn Salta Argent. — Antherid. 22-24 × 3; cell. bas. 30 × 7-8; androst. 100-110 × 5-6 (masc.); perith. 55-60 × 25-28, ped. perith. 60-80 × 10-15 (fem.).

2. **Herpomyces Stilopygae** Speg., Laboulb. Arg. p. 551, fig. 95. — Pel- 3737
therpomyces; masculus semper exappendiculatus; foemineus scutello irregulariter cordato-ovato sursum obtusissime rotundato deorsum sulcis nonnulis nigris praeditus, perithecio lanceolato magno, cellulis parietalibus 1-seriatis angustissime linearibus donatus.

Hab. frequens in antennis P e r i p l a n e t a e o r i e n t a l i s, Montevideo, Buenos Aires et La Plata — Perith. tot. 175-215 × 40-45.

3. **Herpomyces Panesthiae** Thaxt., Proc. Amer. Acad. 1915, p. 32. 3738

Hab. in antennis P a n e s t h i a e l o b i p e n n i s, pr. Peradeniya Ceylon.— Ind. masc.: recept. 80; ejus cell. basilaris 40 × 20; antheridia 60 µ; long. tot. ad apicem antherid. 150 µ. Ind. fem.: Perith. 92 µ, ad apicem spinae infer. 102 µ, latit. maxima 30 µ; recept. primar. 26 × 7, recept. secund. 60 × 28; long. tot. ad apicem spinae 180.

4. **Herpomyces chilensis** Thaxter, Proc. Amer. Ac. of Sc. 54., 1918, 3739
p. 216. — ♂ copiose 4-5 ramosus, ramulis antheridia angusta plerumque curvata gerentibus, 18 × 2; totus 65 µ circ. long.— ♀ caracteribus praecipuis ut in *H. Nyctoborae* cuis varietas tantum apparet. — Totus fungus 175-220 µ long. Perithecio e superiori parte cellulae basali usque ad apicem spinae terminalis 140-165 × 18; spinis subterminalibus 30-32 µ, terminalibus 10 µ; regione basali 15-17 × 22-24; receptaculo secundario 18-20 × 28-32.

Hab. in antennis insecti cujusdam (« wingless roach »), prope Baños de Apoquindo, Chile, America austr.

AMORPHOMYCES Thaxt. — Syll. XI p. 448, XIV p. 728.

1. **Amorphomyces italicus** Speg., Laboulb. ital. II in Anal. Mus. Nac. 3740
Buenos Aires XXVII (1915) p. 38 fig. 1. — Foemina adhuc tantum nota, parvula, 100 µ circ. alta, hyalina, primo erecta dein arcuato-incurvata; cellula basali superne a cellulis perithecigeris constrictione et septo nigro valido obliquo separata; perithecio subclavulato, 24-26 µ lato, obtuse umbonato-ostiolato, umbone leniter fusco-flavescente.

Hab. in A t h e t a quadam indeterm. prope Coneglanum, Ital. bor.

2. **Amorphomyces Trogophloei** Speg., Lab. Arg. in An. Mus. N. Buen. 374

Air. XXIX (1917) p. 465, fig. 7. — Masculus cylindraceus, rectus, cellula basali hyalina, praebasali duplo longiore rufescente, antheridio vix inclinato subconoideo donatus. Foemina elongata arcuata v. sigmoidea mediocris, tota hyalina, cellula basali obpiriformi ungue magno nigro imposita, superne septo discoidali rufescente non v. vix obliquo limitata; perithecio erecto plus minusve arcuato-naviculari, obtuse umbonato ostiolato, cellulis basilaribus minimis parum perspicuis.

Hab. in toto corpore Trogophloei atramentarii, ins. Santiago pr. La Plata Argentina. — Alt. tot. 40-42 µ (masc.) 100-125 (fem.); perith. 90-100 × 30-35.

3. **Amorphomyces Ophioglossae** Thaxt., Proc. Am. Acad. 1912, p. 167, 3742
Speg., Lab. Arg. fig. 5.

Hab. in capite et abdomine Ophioglossae sp., Llavallol, Tucuman Argent. (Spegazzini). — Ind. masc.: tot. longit. cum pede 55-65 × 5; cellula antheridialis 28-32 × 6-7. Ind. femin.: cell. basil. 8 × 8; longit. total. cum pede (7-11 µ), 100-120 × 30-35.

4. **Amorphomyces rubescens** Thaxt., Proc. Amer. Acad. 1912, p. 167, 3743
Speg., Lab. Arg. fig. 6.

Hab. in abdomine Diestotae, Tempesley, Llavallol, Homalotoae in Argentina. — Ind. masc.: long. tot. incluso pede 65 µ; cellulae basil. binae 16-18 × 6; antherid. 35-37 × 9; rostr. 19-20 µ; indiv. fem. cell. basil. 7 × 9; longit. tot. cum pede 140-165 × 25.

TETRANDROMYCES Thaxt., Proc. Amer. Acad. 1912, p. 168. — Ind. masc. ex quatuor cellulis superpositis constantes; cellula superior coronam antheridiorum gerens. Ind. feminea ut in *Dioicomycete.*

1. **Tetrandromyces Brachidae** Thaxt., Proc. Amer. Acad. 1912, p. 168. 3744

Hab. in superf. sup. abdominis Brachidae Reyi, Llavallol Argent. — Ind. masc.: antheridia 23 × 8, eorum unio 16 µ lata; long. tot. cum pede 60 µ: indiv. fem.: sporidia intra perith., masc. 28-30 × 45, feminea 40 µ; perith. 200-235 × 50-65, processus subtermin. 8 µ long.; cellula pedunc. 66 × 20; cellula appendicis sterilis 20 × 12; long. total. ad apicem perith. 250-280 µ.

DIOICOMYCES Thaxt. — Syll. XVI p. 679.

1. **Dioicomyces Anthici** Thaxt. — Syll. XVI p. 679 — var. **fuscescens** 3745
R. Maire, Bull. Soc. Hist. Nat. Afrique du Nord, t. 11., 1920, Extr. p. 14, tab. I fig. 9-10. — A typo differt, colore intensius melleo, cellula subbasali valde applanata, cellula terminali sterili tota fu-

liginosa, minus elongata. Totus fungus 240-250 μ alt.

Hab. in Anthico Rodriguesi Latr., prope Hipponem Reg. Numidiae, Africa bor.

2. **Dioicomyces italicus** Speg., Laboulb. ital. II, in Anal. Mus. Nac. Buenos Aires XXVII (1915) p. 51 fig. 16. — Masculi lineares pusilli, omnino hyalini, medio 1-septati, foeminei mellei, submajusculi, 300-325 μ alti, eximie ubique pellucidi, receptaculo clavulato-obovato, 75 × 25, bicellulari, cellulis subaequilongis, mucrone conico, recto, brevi, obtuso coronato; pedicello obconoideo, abbreviato, 65-75 × 25, pallido; perithecio majusculo, 200 × 50, leniter arcuato, subnaviculari, cingulis prominulis tribus subobsoletis ornato. 3746

Hab. in Anthico? hispido, Coneglanum, Venet., Ital. bor.— Affinis *D. Anthici* Thaxt. sed bene distinctum.

3. **Dioicomyces falcatus** Speg., Lab. Arg. p. 522, fig. 65. — Masculus brevis, receptaculo toto infuscato, antheridio hyalino aequilongo armato. Foemineus mediocris eximie falciformis, perithecio obscure fumoso ex ovato arcuato-naviculari sursum in ostiolo cylindrico crasso obtuso producto, deorsum cellulis basilaribus optime evolutis, dorsali majore turgida, sporis fuligineis nigro-unguiculatis, pedicello hyalino v. subhyalino breviusculo leniter clavulato, receptaculo normali recto subfuligineo appendice recta acutiuscula. 3747

Hab. in thorace et elytris Anthici postmaculati, Sta Catalina B. A., Argentina — Recept. cum anther. 45-48 μ (masc.); perith. 115-120 × 50-55 (sine ped.); alt. tot. 135-160 μ.

4. **Dioicomyces Formicillae** Thaxt. (cnfr. n. 17).— * **D. anthicicola** Speg., Lab. Arg. p. 523, fig. 66 a.—Forma praecedenti praecipue accedens, a qua tamen parte basilari perithecii infuscata, sporis pallidioribus receptaculoque nec non ejusdem appendice vix fumosis differre videtur. 3748

Hab. in elytris et artib. Anthici floralis, La Plata Argent. — Alt. tot. 185-200 μ, perith. 85-100 × 55 (sine ped.). — **D. brachygnatus** Speg., l. c. p. 524, fig. 66 b. — A typo recedit magnitudine semper paulo minore, peritheciis pro ratione brevioribus crassioribusque, ostiolo, peritheciis, nec non sporis pallidioribus.

Hab. in thorace et elytris Formicillae Bruchi, La Plata Arg. — Alt. tot. 200-275 μ; perith. 100-125 × 55-60 (sine ped.).

5. **Dioicomyces glossophorus** Speg., Lab. Arg. p. 525, fig. 67. — Masculus parvulus linearis, antheridio ovato minuto donatus. Foemineus mediocris pallidus rectus perithecio ellipsoideo v. subbiconico utrimque sensim attenuato, dorso et ventre plus minusve convexo, sursum in ostiolo partem ventralem versus incurvato obtuso pro- 3749

ducto, labio ostiolari infero appendice linguaeformi angusta sigmoidea erecta v. pendula ornato, cellulis basilaribus non perspicuis, in pedicello brevi obconico sensim angustato; sporis hyalinis; receptaculo pallido, cellulis subbasali et infera appendicis fumosis.

Hab. in tibiis et abdomine Anthici postmaculati, Santa Catalina B. A., Argent. — Recept. cum anth. 40 μ (masc.); perith. 100-110 × 40-42 (sine ped.); alt. tot. 150-165 μ.

6. **Dioicomyces refractus** Speg., Laboulb. Arg. p. 528, fig. 71. — Mas- 3750
culus adhuc ignotus. Foemineus majusculus flavescenti-fumosus, pedicello ovato-lanceolato ob cellulam basilarem ventralem hypertrophicam abrupte refracto, ostiolo obtusissimo subtruncato, pedicello obconico valde breviore, receptaculo normali appendice longiuscula subincurva armato; sporis hyalinis ungue nigro donatis.

Hab. in thorace et elytris Anthici postsignati in ins. Santiago, La Plata. — Alt. tot. 225-250 μ; perith. 120-130 × 55-60 (sine ped.).

7. **Dioicomyces infuscatus** Speg., Lab. Arg. p. 527, fig. 68. — Mascu- 3751
lus ignotus. Foemineus totus castaneus, mediocris, perithecio late ovato leniter inaequilaterali et inclinato apice abrupte in ostiolo brevi obtuso producto, cellulis basilaribus parum manifestis, pedicello obconico brevi crasso fusco, receptaculo crasse infuscato appendice longiuscula armato.

Hab. in elytris Anthici pallidicoloris, La Plata — Alt. tot. 175-190 μ; perith. 105-115 × 58-60 (sine ped.).

8. **Dioicomyces pallidus** Speg., Lab. Arg. p. 527, fig. 70. — Masculus 3752
linearis rectus subhyalinus, margine nigrifactus. Foemineus mediocris rectus v. plus minusve sigmoideus, receptaculo excepto infuscato, totus pallide melleus; perithecia cymbiformia ventre plana v. vix concava dorso valide convexa, sursum in ostiolo subcylindrico sublongiusculo producta, cellula basilari ventrali leniter prominula et perspicua, pedicello recto v. arcuato breviore hyalino suffulta; receptaculum atrum, appendice ovata crassa obtusa concolore ornatum.

Hab. ad genitalia Anthici postmaculati, Santa Catalina B. A., Argent. — Recept. cum anther. 45 μ (masc.); alt. tot. 175-200 μ; perith. 90-100 × 35-45 (sine ped.) (fem.).

9. **Dioicomyces rostellatus** Speg., Lab. Arg. p. 529, fig. 72. — Mascu- 3753
lus non inventus. Foemineus obscure fumoso-castaneus, perithecio erecto subnaviculari-cylindraceo dorso recto ventre convexiore saepius sursum leniter incrassato abrupte in ostiolo crasso brevi co-

nico obtuso angustato, sub ostiolo cornu crassiusculo modice patente armato, cellulis basilaribus parum perspicuis; pedicello obconico crasso obtuso pallidiore basi geniculatim receptaculo adfixo; receptaculo intense colorato, appendice recta acuta sublongiuscula coronato.

Hab. in apice elytrarum Anthici floralis, La Plata. — Alt. tot. 150-160 μ; perith. 90-100 × 45 (sine ped.).

10. **Dioicomyces subtorulosus** Speg., Lab. Arg. p. 430, fig. 73. — Masculi desiderati; foeminei mediocres pallidissimi rectiusculi v. lenissime subsigmoidei, peritheciis erectis subnaviculatibus margine ventrali recto dorsali convexo ibique in tertio infimo dentibus 2 v. 3 serratis sursum abrupte conoideo-ostiolatis, apice obtusissime rotundatis, pedicellis obclavulatis hyalinis, parum brevioribus, receptaculo subhyalino appendice brevi obtusa fumosa, ungue crasso atro. 3754

Hab. in abdomine Anthici decerpti in ins. Santiago, La Plata — Perith. sine ped. 110-120 × 35-40; alt. tot. 225-250 μ (femin.).

11. **Dioicomyces torulosus** Speg., Lab. Argent. p. 531, fig. 74. — Masculus parvulus fere achrous linearis, antheridio majusculo lanceolato donatus. Foemineus majusculus totus pallidissime melleus v. hyalinus; perithecio maximo subfusoideo leniter incurvato, parte media supera utrimque 3-gibbosa, ceterum fere laevi, cellulis basilaribus parvis triangularibus; pedicello e cylindraceo subfusoideo parum breviore; receptaculo pro ratione parvo appendice conica recta brevi ornato. 3755

Hab. in apice elytrarum et abdominis Anthici decerpti in insula Santiago, La Plata. — Masc.: recept. cum anther. 55 μ; fem.: alt. tot. 300-350 μ; perith. sine ped. 175-200 × 45-50.

12. **Dioicomyces uncinatus** Speg., Lab. Arg. p. 582, fig. 76. — Masculus parvus fere linearis infuscatus, antheridium conoideum hyalinum fulcens. Foemineus majusculus, perithecio ovato-elongato valide arcuato subfuligineo, in ostiolo sensim attenuato apice obtusiusculo producto, cellulis basilaribus perspicuis sed non v. vix prominulis; pedicello subfusoideo hyalino sursum valido attenuato; receptaculo plus minusve nigrefacto, appendice conica acutiuscula v. leniter arcuata. 3756

Hab. frequens in thorace et elytris Anthici parvi, Sta Catalina B. A., Arg. — Recept. cum anther. 50 μ (masc.); perith. sine ped. 85-100 × 38-45, alt. tot. 250 μ (fem.).

13. **Dioicomyces endogaeus** Picard, Bull. Soc. Mycol. Fr., 1913, p. 523, fig. 6. — ♂. Longe cylindraceo-clavulatum e 4 cellulis constitutum, basi pede seu cellula nigra adfixo; cellulis 3 inf. receptaculum efformantibus, 4ª v. superiori antheridio sistente et tubulo acuto antheridio longitudine subaequante terminato: totus 95 μ long., antheridium 65 μ long. basi 4 μ lato, supra 8-9 μ — . Receptaculum e quatuor cellulis constitutum, subbasali lateraliter perithecium gignenti; perithecio infra e cellula pedicellari elongata donato, elongato, basi leniter inflato apice sensim attenuato obtuso, 80 μ longo 33 μ lato, pedicello 30 × 15. — Totus, long. maxima, 175 μ; hyalinus v. pallide succineus perithecio et cellula tertia receptaculi parum obscurioribus. 3757

Hab. ad helitras Añilli caeci, Foix Ariège Gallia.

14. **Dioicomyces umbonatus** Thaxt., Proc. Am. Acad. 1912, p. 170, Speg., Lab. Arg. fig. 75. 3758

Hab. in basi elytrae prope marginem inter. Anthici parvi, Temperley et Sta Catalina, Argent. — Indiv. masc., cellula basil. cum pede 20 μ; tot. longit. ad basim rostro 35 × 5; rostrum 12 μ. Ind. fem. Perith. ad apicem 70-78 × 40-43 (incl. umbone); cellula pedunc. 40-42 × 12-15; receptac. ad apicem appendicis, incl. pede 42 μ; tot. long. 135-145 μ.

15. **Dioicomyces melleolaris** Thaxt., Proc. Amer. Acad. 1912, p. 170, Speg., Lab. Arg. fig. 69. 3759

Hab. in elytra, imprimis dextera Anthici parvi, Palermo Llavallol et Sta Catalina Argentina. — Ind. masc. long. tot. 45 × 7,5; indiv. femin. sporidia 28-30 × 3,5; perith. 99-100 × 26-32; cellula pedunc. 65-90 × 16; cellula appendicis 15-16; recept. incluso pede 28.

16. **Dioicomyces Formicillae** Thaxt., Proc. Am. Acad. 1912, p. 169, Speg., Lab. Arg. fig. 66. — Cnfr. n. 5. 3760

Hab. in elytris Formicillae strangulatae et leporinae, Palermo, Llavallol, Temperley La Plata, Argent. — Indiv. masc. long. total. cum pede et rostro 60-70; cellula basilaris 20 × 8; indiv. femin., sporidia fem. 40-42 × 8, masc. 35 × 5; perith. 145-165 × 45-50, cellula pedunc. 140-180 × 25; recept. cum pede et cellula appendicis 40-65.

17. **Dioicomyces angularis** Thaxt., Proc. Am. Acad. 1912, p. 171, Speg., Lab. Argent. fig. 64. 3761

Hab. in apice elytrae et abdomin. Anthici parvi, Temperley et Llavallol et Sta Catalina, Argent. — Indiv. mascul.: long.

tot. excl. rostro 30 × 6; rostr. 8 μ; cellula basil. excluso pede 8 μ — Indiv. fem.: Perith. 80-94 × 35-42, cellula pedunc. 98-120 × 15; recept. ad apicem appendicis 38; long. total. 185 μ.

BORDEA Maire, Bull. Soc. Hist. Nat. Afrique du Nord t. VII, 1916, p. 13 (Etym. a Cl. DE BORDE entomologo gallico sollertissimo).— Antheridium unicellulare, in appendice masculo simplici acrogenum; appendices steriles nullae; appendix mascula e cellula terminali receptaculi orta, basi nigro-annulata; perithecium asymmetricum, e cellula subbasali ortum.

1. **Bordea coronata** Maire, l. c., tab. I fig. 2-5.— Minor (60-75 μ long. tot.) dilutissime brunneola; receptaculum (30-38 μ long.) 3-cellulare; cellulae basalis pede atrato; appendix masculus (28-30 × 4-5) conicus v. subfusiformis, transverse 2-3 septatus, basi nigro-annulatus, apice antheridium conicum rectum v. curvulum, lateraliter cornutum gerens. Perithecium (62-75 × 26-28) pedunculo unicellulari brevi a receptaculo non v. vix discreto suffultum, extus ventricosum; intus rectum, in collum breve constrictum; ostiolum apicale, basi apophysibus 8 coronatus; ascosporae fusiformes, utrinque acutae, inaequaliter 1-septatae, hyalinae, laeves, strato mucoso obvolutae, 26-30 × 2. 376

Hab. in membris et in abdomine Brachyglutae Aubei Tourn., pr. Biskra Algeria, Africa bor.

2. **Bordea platensis** Speg., Lab. Arg., An. Mus. Buenos Aires, 1917, XXIX p. 463, fig. 3 (ut Sectio gen. *Acompsomyces* Thaxt., Syll. XVI p. 692, XVII p. 917, XXII p. 11.—Pusillus, ramulo antheridifero 3-cellulari, cellula basali ceteris conspicue crassiore septo nigro incrassato ibique valido constricta, cellulis duabus superis gracilibus subhyalinis horizontaliter septatis, antheridio apicali mediocre elongato-conico subinermi, perithecio cum pedicello abrupte geniculato-inflexo subolivaceo appendiculato, ostiolo subcylindrico elongato pallidiore coronato. 376

Hab. in elytris Decarthri simplicis, insula Santiago Argentinae. — Alt. tot. 100-110 μ; perith. 60-65 × 20-25.

3. **Bordea decarthricola** Speg., Lab. Argent., An. Mus. Buen. A., 1917, XXIX p. 462 fig. 2. — Pusillus, ramulo antheridifero 3-cellulari crassiusculo fumoso, septo praecapicali oblique nigro, antheridio apicali obliquo eximie 1-spinoso, perithecio recto subhyalino subexappendiculato, ostiolo subabbreviato. 376

Hab. in toto corpore Decarthri rufipennis, insul. San-

tiago La Plata, Argentinae. — Alt. tot. 100-110; perith. 75 × 30.

SYNANDROMYCES Thaxt., Proc. Am. Acad. 1912, p. 174. — Receptaculum e cellulis binis constans, una cum cellula basilari appendicis structuram compactam constituens; perithecia majuscula, cellulam ascogenam unicam et quatuor cellulas parietales in quaque serie gerens, cellula basilari brevi isthmum angustum inter cellulam basilarem et receptaculum formans; antheridia in fasciculum dense conferta, rostris divergentibus; trichogynum bicellulare. — Genus *Acompsomyceti* proximum.

1. **Synandromyces Telephani** Thaxt., Proc. Am. Acad. 1912, p. 175. 3765
Hab. in elytris, prothorace, etc. Telephani sp., Temperley et Llavallol, Argent. — Sporidia 40 × 6; perith. inclusa basi 45-60 × 35; appendix, inclus. antheridiis, 45-50 × 20.
2. **Synandromyces geniculatus** Thaxt., Proc. Amer. Acad. 1912, p. 176. 3766
Hab. superf. super. abdominis Telephani sp., Temperley et Llavallol, Argent. — Sporidia 30 × 5; perith. 135-155 × 45-60; processus rostratus 45-50 μ; appendix, incluso antheridio, 30 × 20 (pars libera).
3. **Synandromyces javanus** Thaxt., Proc. Amer. Acad. 1915, p. 34. 3767
Hab. in artubus insect. ad sect. Telmatophili pertinentis, Samarang Java. — Perith. 120-135 × 40-50; recept. incluso pede 40 × 32, pars libera appendicis antheridialis 35-40 × 22-25, long. tot. ad apicem perithecii 155-175.

ILYOMYCES Picard, Bull. Scient. France Belgique t. 50., 1916-1917, p. 445. — Gen. *Acallomyces* Th. proximum, a quo differt praecipue appendicibus ramosis nec simplicibus, cellulis receptaculi obliquis basali semper bene evoluto.

1. **Ilyomyces Mairei** Picard, l. c. p. 446, tab. VI fig. 3. — Hyalina. Receptaculo bicellulari, 40 μ long., cellulis septo obliquo divisis, et tunc subparallele dispositis, basali infra fuscata; subbasali cellulam alteram pedunculum perithecii ferente alteram appendicem; perithecio subellipsoideo-elongato, parum incurvato 110-115 × 45, apice poro 4-labiato praedito, labiis inaequalibus, duobus apophysatis; appendicibus pedunculatis apice cellulis duobus divergentibus singulis antheridiis duobus phialaeformibus terminatis, 75 μ long. — Totus fungus 150-155 μ long. 3768
Hab. in Steno elegante, Bonde (Vaucluse), Gallia.
2. **Ilyomyces Lavagnei** (Picard) Picard, Bull. Scient. France Belgique 3769

t. 50., 1916-1917, p. 446, *Acallomyces Lavagnei* Picard F., Bull. Soc. Entom. de Fr. 1913, n. 18, p. 462, 3 fig. — Peritheciis flavidis, oblongis utrinque parum attenuatis, 170-250 µ long.; apice labiis quatuor mamillaribus clausis; sporidiis hyalinis oblongo-clavulatis bilocularibus, 50 µ long.; appendice basilari perithecii 80 95 µ long. ex tribus cellulis superpositis constituto, cellula terminali duobus raro tribus antheridiis elongatis obclavatis 20 µ long. praedita; cellulis duobus receptaculi angustis oblique subparallelis.

Hab. ad thoracem, élythras raro ad abdominem Stenus aceris in silva St. Guilhem-le-Desert (Hérault), Gallia (Leg. LAVAGNE).

STIGMATOMYCES H. Karst. — Syll. VIII p. 912, XIV p. 729, XVI p. 680, XXII p. 11.

1. **Stigmatomyces asymmetricus** Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, p. 718. — Receptaculo crasso et crasse tunicato pedem versus angustato, cellula basilari subbasali longiore, incurvata pallidiori v. hyalina, subbasali demum flavo-rubra; cellula pedicellari appendicum rubro-succinea, duplo longiore quam latiore; cellula pedicellari perithecii cum cellulis appendicum concolori; ventre perithecii granuloso-rugoso, 150 × 180 × 40-45, sporis circ. 25 × 2,5, receptaculo 85-100 × 25-28, appendicibus 46 × 10, quorum cellula pedicellari 25 × 10, totus fungus 250-280 µ longo. 3770

Hab. in abdomine Agromyzidae sp., Kamerun Africa occ. trop. — *S. Scaptomyzae* proxima.

2. **Stigmatomyces divergens** Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, p. 719. — Subsigmoideus, crassiusculus obscure rubro succineo-brunneo, receptaculo hyalino perithecio breviore; cellula basilari appendicum brevi, valida, extus fortiter convexa, rubro-brunneo tincta, appendicibus caeterum brevibus, crassis, basi angustato-constrictis obscurioribus; cellula pedicellari perithecii magis lata quam longa, secundaria angustiori; perithecio 155-170 × 42-50, sporis circ. 25 × 3, appendicibus 42-48 × 4, receptaculo 80-100 × 28, totus fungus 250-280 µ long. 3771

Hab. ad capitem et alam Agromyzidae sp., Kamerun Africa occ. trop. — Proxima *S. Drapetis.*

3. **Stigmatomyces macrandrus** Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, p. 720. — Elongatus, gracilis, stramineus supra receptaculum hyalinum infra ventre brunneo tincto; receptaculo plerumque curvo diametro aequali, cellula basali quandoque parum latiore; appendicibus vix leniter divergentibus, longis, axe e cellulis 7-8 3772

sensim minoribus efformato; cellula primaria et secundaria perithecii subaequalibus; ventre recto, apice perithecii prominenti-incurvato infra leniter expanso, supra prominenter labiato; perithecio 190 μ, ventre 70-75 × 30-35, sporis (in perithecia) circ. 30-35 × 35, appendicibus 100-110 × 16, receptaculo 210-245 × 21, totus fungus 385-450 μ long.

Hab. in Anthomyidae sp., (Dipt.), Kamerun Africae occ. trop. — *Stig. dubio* proxima species.

4. **Stigmatomyces tortilis** Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, 3773
p. 721. — Breviuscula et crassiuscula, curvula, sordide flavescens supra receptaculum hyalinum brunnea; cellula pedicellari perithecii magis lata quam longa, ventre lato et infra leniter inflato, cellula distali prominula collo incurvato crasso longitudine subaequali, cellulis extus guaina spiraliter contorta usque ad apicem abrupte angustato praeditis; perithecio 140 × 32-35, sporis circ. 25 × 3,5, appendicibus 60 μ long. eorum cellula basali 14 × 6, receptaculo 80-90 × 18-21, totus fungus 225-250 μ long.

Hab. in abdomine Anthomyidae sp., Kamerun Africa occ. trop. — Proxima *S. Limnophorae* sed omnino diversa.

5. **Stigmatomyces Borbori** Thaxter, Proc. Amer. Ac. of Sc. 51., 1918, 3774
p. 724. — Cellula basali receptaculi infra angustata v. medio constricta, subbasali lata et distincte longiori, diametro subuniformi marginibus parum convexis; cellula pedicellari appendicum, latiori quam longiori, extus convexula, axe plerumque 6-cellulari, basali flavo-brunnea, latiori quam longiori subsymmetrica, caeteris hyalinis sensim angustioribus extus abrupte convexis, ambitu late irregulariterque ellipsoideo; cellula pedicellari perithecii utrimque libera longiore quam latiore, basali in prominentiam abrupte desinente, interiori supra basim cavitatis ascigerae extensa; perithecio apice oblique incurvato; perithecio 110-120 × 35, sporis 35 × 4,5, appendicibus antheridiis inclusis 56 × 25, receptaculo 65-68 × 24, totus fungus 200-240 μ long.

Hab. in Borbori sp. (Dipt.), Kamerun Africa occ. trop. — *St. Borboridino* proxima species.

6. **Stigmatomyces Borboridinus** Thaxter, Proc. Amer. Ac. of Sc., 53., 3775
1918, p. 725. — Receptaculo hyalino, basi angustato, cellula pedicellari appendicum breviuscula basi lata subobliqua, appendicibus ex tribus cellulis flavo-brunneis efformatis, basali parum obscuriore, parum longiore quam crassiore, subbasali statura minori extus magis convexa parum latiori quam longiori tria antheridia latere interno

conferta apice acuminato-incurvata gerentibus; perithecio erecto v. parte distali leniter curvulo, cum axe cellulae basalis et pedicellaris commune sed ventre distincte divergente; peritheciis 100-120 × 28-32, sporis 36 × 5,5, apparatu pedicellari 35 × 20 supra, 14 μ infra; appendicibus apicibus antheridiorum inclusis 42 × 22, receptaculo 50-64 × 17-20; totus fungus 190-210 μ long.

Hab. ad crura B o r b o r i sp. v. affinis. — *St. Borbori* proxima spec.

7. **Stigmatomyces contortus** Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, 3776
p. 726. — Hyalinus; cellula pedicellari et apparenter cellula basali interna pedicellum perithecialem gracilem efformantibus cum receptaculo juxta eum abrupte incurvato et pede ad ventrem approximato, appendicibus libere projectis e parte incurvata receptaculi; cellula basali receptaculi abrupte incurvata et infra parum angustata, subbasali parum longiori et crassiori; perithecio duobus prominentiis donato, 100 × 35, parte pedicellari 37 × 17, sporis 32 × 3-5, appendicibus terminalibus 20 × 8, lateralibus basi 18 × 14, receptaculo 45-50 × 15, appendicibus in exemplaribus junioribus 40 × 9.

Hab. ad alas B o r b o r i sp. (Dipt.) vel generis affinis, Kamerun Africa occ. trop.

8. **Stigmatomyces divaricatus** Thaxter, Proc. Amer. Ac. of Sc., 53., 1918, 3777
p. 727. — Longiuscula et gracilis ambitu irregulari, subhyalina, appendicibus et perithecio, pedicello incluso, fere symmetrica divergentibus e receptaculo et angulum obtusum efformantibus; caeterum St. Borbori affinis a qua differt praecipue appendicibus quorum cellula principali longiori quam latiori est nec contra, cellula androfori tres antheridia gerenti et a basali distincte separata; peritheciis 120-135 × 28-33, parte pedicellari circ. 68 × 18, sporis 40 × 5, appendicibus 75-86, cellula pedicellari 18 × 14, receptaculo 112-130 × 18-24, totus fungus 280-315.

Hab. in B o r b o r o, Kamerun Africa occ. trop. — *S. Borbori* valde affinis.

9. **Stigmatomyces italicus** Speg., Laboulb. ital. II, in Anal. Mus. Nac. 3778
Buenos Aires XXVII (1915) p. 71 fig. 37. — Pallidissime melleus, parvus, 300 μ altus; cellulis subperithecialibus majusculis; perithecio late ovato, 200 × 55, in collo praelongo, 125 × 12, apice oblique apiculato producto; synantheridio sessili, 40 × 12, basim perithecii vix attingente, fusculo, octomero.

Hab. in B o r b o r o (f i m e t a r i o ?), prope Coneglanum, Ven., Ital. bor. — *St. papuano* Thaxt. valde affinis, synantheridio

breviori tantum distinctus.

10. **Stigmatomyces pentandrus** Thaxt., Proc. Am. Acad. 1917, p. 663. 3779
Hab. in basi artuum posteriorum Muscineae cujusdam ad Borborideas spectantis, pr. Cartago Costa Rica (Calvert). — Sporidia 36 × 4; perith. 124 μ; venter 42-51 × 42-44; rostrum 50-54 μ apex 22-25 μ; appendix 34 × 10; recept. 110-170 × 22; long. tot. ad apicem perith. 245-315.

11. **Stigmatomyces Chilomenis** Thaxter, Proc. Amer. Ac. of Sc. 53., 3780
1918, p. 748. — Subhyalinus, leniter viridi-flavo tinctus; receptaculo parvo, cellula basali angusta subgeniculata, e subbasali minori subtriangulari oblique separata; cellulis axialibus appendicum quatuor subaequalibus parum latioribus quam longioribus, omnibus antheridium unicum gerentibus, terminali typice duos, antheridio terminali excepto; cellula pedicellari perithecii parva et angusta, medio constricta, rugula levi praedita; secundaria minori oblique separata; cellula basali basim cavitatis ascigerae circumdanti, apice summo appendicibus erectis praedita; perithecio e apice appendicum regione basali inclusa 135 μ long., appendicibus longioribus 30 μ long., sporis 28 × 3; appendicibus 60 × basi 7; receptaculo 60 × 18 pede incluso, totus fungus circ. 200 μ long.

Hab. ad elytras Chilomenes lunatae (Dipt.), Nairobi Africa or. britannica. — Inter *S. virescenti* et *coccinelloidi* media.

12. **Stigmatomyces Dacinus** Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, 3781
p. 745. — Habitus rigidus, erectus, rectus v. curvulus, parietibus crassiusculis; cellula basali receptaculi pallide brunneo flava, acutata subbasali usque duplo longiore, hyalina, diametro subuniformi; cellula pedicellari appendicum angusta, curvatula; axe appendicum plerumque 8, quandoque 7 cellulis constituto, cellula basali brunneo-flava sterili, caeteris hyalinis oblique septatis, omnibus duobus antheridiis oblique superpositis rectis acutatis donatis; cellula pedicellari perithecii hyalina duplo et ultra longiore quam latiore, basali parva subtriangulari ventre concolori; ventre brunnescenti-flavo, recto, subsymmetrico, late ellipsoideo, cellulis parietalibus subcirculariter dispositis collo parum distincto praedito, parte cacuminali distincte producta; perithecio 140-160 × 42 majoribus usque ad 180 × 50, projectione terminali 10-15 μ long., sporis 42 × 3,2, appendicibus 70-85, receptaculo 86-105, totus fungus 280 μ circ. long. exemplaribus majoribus usque ad 350 μ.

Hab. in Daco sp. (Dipt.), Sarawak Ins. Borneo.

13. **Stigmatomyces arcuatus** Thaxter, Proc. Amer. Ac. of Sc. 51., 1918, 378
p. 735. — Flavescens, perithecium et appendicibus rubrescentibus, parum regulariterque arcuatus, curvatura apicali plerumque magis abrupta; axe appendicum quinquecellulari, duobus inferioribus saturatius coloratis, basali latiori quam longiori, sterili, subbasali quandoque latiori, antheridio in cellula quinta solitario, in caeteris, basali excepta, duobus; appendicibus crassiusculis, cellula pedicellari perithecii latiuscula, ventre parum asymmetrico, in parte distali plus v. minus inflato, a collo crasso parum distincto; perithecio 100-112 × 28-35, sporis circ. 28 × 3-5, appendicibus circ. 50 × 12, receptaculo 45-50 × 16, totus fungus 180-200 μ long.

Hab. ad crura et alas Diopsidis sp. (Dipt.), Kamerun Africa occ. trop.

14. **Stigmatomyces longirostratus** Thaxter, Proc. Amer. Ac. of Sc. 53., 378
1918, p. 736. — Eximie elongatus, undique pallide sordideque flavo-brunnescenti, cellula basali infra parum curvato-angustata; cellula pedicellari appendicum quandoque circ. longiore quam latiore; appendicibus leniter divergentibus, elongatis, angustis, axe 12-cellulari, basali sterili parum longiori quam latiori saturatius colorata, subbasali concolori, caeteris omnibus dua antheridia gerentibus, ultima excepta unum tantum gerenti; cellula pedicellari perithecii cum subbasali concolori; apice perithecii extus curvulo, lato, leniter inflato; perithecio 320 × 40, sporis 35 × 4, appendicibus 140 × 14, receptaculo 115 × 25, totus fungus usque 500 μ et ultra longo.

Hab. ad alas Diopsidis sp. Kamerun, Africa occ. trop.

15. **Stigmatomyces porrectus** Thaxter, Proc. Amer. Ac. of Sc. 53., 378
1918, p. 737. — Longiusculus, ambitu irregularis; cellula basali receptaculi obconica, leniter flavido tincta, subbasali omnino hyalina, abrupte angustata, plerumque distincte breviori, subisodiametrica; cellula pedicellari appendicum parvula, subirregulari duplo circ. longiore quam latiore, infra hyalina supra flavescenti v. flavo-brunnescenti; cellula basali appendicum obscuriori, magis lata quam longa sterili, subbasali concolori, minuta depressa subtrigona, duobus antheridiis praedita; basi appendicum ad angulum acutum (45°) divergenti; cellula pedicellari perithecii lata, omnino hyalina, ultra insertionem appendicum, elongata, cellula secundaria subtrigona; ventre subasymmetrico ad basim inflato, in parte distali acutato, cellulis parietalibus spiraliter dispositis, apice parum expanso; perithecio 125-155 × 35-42, sporis circ. 24 × 2-5, appendi-

cibus 52-60 × 15, receptaculo 85-140 × 20-24, totus fungus 250-350 μ long.

Hab. ad alas et abdominem Diopsidis sp. (Dipt.), Kamerun, Africa occ. trop.

16. **Stigmatomyces schwabianus** Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, p. 738. — Undique sordide flavescens; receptaculo parvo, curvulo, cellula basali infra acutata, subbasali parum breviori et latiori; cellula pedicellari appendicum in parte distali parum prominenti, appendicibus suberectis leniter incurvatis; antheridiis regulariter seriatim superpositis, cellula basali lata, obscuriori, sterili vix longiori quam latiori, subbasali parva subtrigona, cellulis caeteris 61 axialibus duobus antheridiis praeditis; ventre plus minus inflato, cellulis parietalibus subannulatim dispositis, collo aegre distinguendo sed in parte distali constricto, curvato: perithecio 175-280 × 30-42, sporis circ. 40 × 5, appendicibus 65-80 × 12-14, receptaculo 60-90 × 21-24, totus fungus 250-400 μ long. 3785

Hab. ad crura et ad basim alarum Diopsidis sp., Kamerun, Africa occ. trop. — Proxima *St. Diopsidi* et *porrecti*.

17. **Stigmatomyces chilensis** Thaxt., Proc. Amer. Acad. 1917, p. 685. 3786

Hab. in artubus et abdomine Discocerinae sp. (Dipt.), Concepcion, Chili. — Sporidia 30 × 3; perith. 130-160 × 55-64 × 35-42; appendix 52-60 × 18; recept. 90-140; long. total. 250-300, raro usque 400 μ.

18. **Stigmatomyces Discocerinae** Thaxt., Proc. Amer. Acad. 1917, p. 687. 3787

Hab. in artubus et thorace Discocerinae sp. in Jamaica et Trinidad. — Sporidia 30 × 3; perith. 95-105 × 30-35; appendix 30 × 12; recept. 35-55 × 12-15; long. tot. ad apicem perith. 125-175 μ.

19. **Stigmatomyces caribbeus** Thaxt., Proc. Amer. Acad. 1917, p. 688. 3788

Hab. in abdomine speciei Discocerinae, Panama et Jamaica. — Sporidia 30 × 3; perith. 122-140, venter 70 × 32, rostr. 65-70 × 10-12; append. 40-50 μ; recept. 70-100 × 15-20; long. tot. ad apicem perith. 210-265 μ.

20. **Stigmatomyces ventricosus** Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, p. 743. — Breviusculus et crassiusculus; receptaculo hyalino, cellula basilari infra plerumque parum curvata et e pede acutata, subbasali multo minori, plerumque magis lata quam longa; axe appendicum e cellulis 4 sensim minoribus efformato, quarta minori unum antheridium gerenti, duobus superpositis superiori spinosa, omnibus aliis duo antheridia gerentibus; ventre obscuro brunneo-succineo, brevi crasso parum divergenti; peritheciis 75-85 μ, 3789

sporis 30 × 3, ventre 42-48 × 30-36, appendicibus 45-50 × 10, receptaculo 42 × 18, totus fungus 120-140 μ long.

Hab. in abdomine speciei gen. affinis Discocerinae, Kamerun, Africa occ. trop. — *St. Discocerinae* proxima sed ventre inflato omnino diversa.

21. **Stigmatomyces subinflatus** Thaxter, Proc. Am. Ac. of Sc. 53., 1918, 3790
p. 739. — Rectus v. axis receptaculi leniter curvatus, pallide flavus; receptaculo subhyalino, cellula basilari et pedicellari appendicum et parte inflata infra apice rubrido tinctis: cellula basilari receptaculi duplo longiori quam basilari; cellula pedicellari appendicum duplo longiore quam latiore, leniter rubrida, margine externo recto v. leniter convexo; axe appendicum caeterum tricellulare, omnibus antheridium solitarium gerentibus; ventre longiusculo et angusto symmetrice inflato spiraliter cristato, perithecio sub apice abrupte inflato; perithecio 110-120 × 28-30, sporis 18 × 2-5, ventre 68 μ, appendicibus 35 × 9, receptaculo 45-55 × 16, totus fungus 150-175 μ, longo.

Hab. ad crura anteriora Drosophilae sp. (Dipter.), Kamerun Africa occ. trop.

22. **Stigmatomyces varians** Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, 379
p. 740. — Symmetrice subsigmoideus; perithecio eximie elongato, partibus supra receptaculum positis pallidis, fere flavo-citrinis cellulis duobus inferioribus appendicum cellulam basalem divisam simulantibus, inferiori sterili, superioribus duo, tertia unum tantum antheridia gerentibus; appendicibus erectis v. quandoque leniter divergentibus; axe receptaculi et ventris coincidenti recto; ventre magnitudine et forma variabili, collo crasso curvato et e basi lata leniter acutato v. magis angustato, basi constricto et in parte distali parum expanso; perithecio 120-140 e 30-35, sporis 35 × 4, receptaculo 45-55 × 20-26, appendicibus 42-45 × 8-10, totus fungus 190-225 μ long.

Hab. in abdomine speciei ignotae Drosophilidarum, Kamerun Africa occ. trop. — A typo *S. Sigalloessae, Scaptomyzae, Drosophilae* spectans sed maxime variabilis et tunc aegre diagnosticandum.

23. **Stigmatomyces grenadinus** Thaxt., Proc. Am. Acad. 1917, p. 662. 379
Hab. in artubus Limosinae ferrugineae (Dipt.), Grand Etang Grenada. — Sporidia 18 × 3; perith. 85-100 μ, venter 35-38 × 24-28, rostrum 35-38 × 11, apex 18 μ; appendix 35 μ; recept. 50-70 × 14; long. tot. ad apicem perithecii 150-185.

24. **Stigmatomyces proliferans** Thaxter, Proc. Amer. Ac. of Sc. 53., 3793
1918, p. 733. — Rectus gracilis, pallide flavus praecipue venter; receptaculo hyalino, basi appendicum succineo-brunneo tincto: receptaculo dimidium circ. totius fungi longo; cellula pedicellari appendicum longiore quam crassiore, axe appendicum plerumque ex 7 cellulis oblique superpositis sensim minoribus efformato, omnibus terminali excepta, antheridiferis, antheridiis angustis oblique insertis ventre et collo aegre distinguendis, cellulis ultimis superioribus ramulos angustis dichotomos coralloides apice inflatos gelatinosos efformantibus; cellulis pedicellaribus perithecii longioribus quam crassioribus, lateraliter laciniatis, subaequalibus; perithecio erecto, angustulo, parte distali parum longiore quam ventre leniter inflato, collo non abrupte distincto, ventre et collo spiraliter dextrorse ornatis. Peritheciis 140 × 30 (ventre) × 14 (collo), sporis 30 × 3,6, appendicibus 50-55 μ, usque ad apicem ramulorum 70-80 μ, receptaculo 120-140 × 18; totus fungus 280-315 μ long.

Hab. ad thoracem Limosinae punctipennis (Dipter.), Kamerun Africae occ. trop.

25. **Stigmatomyces platystoma** Thaxter, Proc. Amer. Ac. of Sc. 53., 3794
1918, p. 732. — Totus plus minus curvatus v. tantum ad apicem; receptaculo hyalino; axe appendicum plerumque ex 7 cell. efformato basali et subbasali subaequalibus obscurioribus, caeteris sensim minoribus, omnibus convexis septis obliquis praeditis, quatuor inferioribus duo antheridia interne posita gerentibus; cellulis duobus pedicellaribus longioribus quam crassioribus, ventre e basi angustata conoideo, in parte distali duplo latiore, apice lato abrupte distincto parum inflato; peritheciis 85-100, sporis 30 × 3,5, venter 45-55 × 30 32, basi 16 μ lato, apice circ. 20 × 12, appendicibus 55-65, receptaculo 42-44 × 15, totus fungus 155-160 μ long.

Hab. ad crura Limosinae punctipennis, Kamerun Africa occ. trop. — *St. prolifero* proxima species.

26. **Stigmatomyces Limosinoides** Thaxter, Proc. Amer. Ac. of Sc. 53., 3795
1918, p. 730. — Subhyalinus v. flavescens, leniter sigmoideus, perithecium brunneo-flavescens; receptaculo infra curvato longiusculo; cellula pedicellari appendicum duplo et ultra longiore quam latiore, cellulam pedicello perithecii etiam superante; axe appendicum angustato 6-8 cellulis efformato, basali parva brevi, pallide succineo-brunnea, caeteris rotundatis, apicem versus sensim minoribus; ventre perithecii flavido-brunneo, fere symmetrico, subellipsoideo, crasse tunicato, erecto v. leniter interiori parte reclinato;

collo lato ventris longiore, apice brevi quandoque leniter inflato, vertice subtruncato infra abrupte compresso; perithecio 100-125 × 35-42, sporis 25 × 3,5, receptaculo 100-130 × 18-22, appendicibus 50-60 μ, totus fungus 225-300 μ long.

Hab. ad crura posteriora L i m o s i n a e p u n c t i p e n n i s, [Dipt.], Sarawak Borneo. — *St. papuano* Thaxt. valde affinis et verisimiliter varietas ejusdem.

27. **Stigmatomyces distortus** Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, p. 728. — Distincte curvatus, hyalinus dein pallide flavido tinctus, ventre obscure brunneo-flavo, appendicibus infra pallide brunnescentibus, e basi oblique dispositis, e cellulis quatuor persistentibus efformatis, inferioribus sublatioribus, subaequalibus brunneis, e cellulis duobus parvis evanescentibus terminatis (? antheridiis); perithecii apice partibus indistinctis terminato sed prominentia breviter rotundato-digitiformi producto; peritheciis 85-100 × 26-28, proiectione ejusdem 10 × 5, sporis 24 × 3-5, receptaculo 40-50 × 14, appendicibus circ. 50 μ, totus fungus 150 μ long. 3796

Hab. ad capitem L i m o s i n a e p u n c t i p e n n i s [Dipt.], Kamerun, Africa occ. trop.

28. **Stigmatomyces tortimasculus** Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, p. 734. — Brevis crassus v. plus minus elongatus gracilis, subhyalinus, ventre perithecii pallide brunneo-flavo excepto; receptaculo varie elongato, e basi angustato curvato; axe appendicum subirregulari, curvo, quinquecellulari, terminali minuta obtuse mucroniformi, omnibus duo antheridia gerentibus, collo antheridiorum longo, varie curvato et irregulariter divergenti; ventre perithecii variabile, latiusculo, brevi et abrupte inflato, collo crasso et leniter angustato, apice parum distincto variabili; perithecio 88-100 × 32 v. usque 120 × 35, sporis 20 × 3,5, receptaculo 42-75 × 12-14, v. usque 130 × 14, appendicibus circ. 35 μ longis, totus fungus 150-200 μ v. usque 275 μ long. 3797

Hab. in L i m o s i n a e spec., exemplaribus majorjbus in thorace, minoribus ad crura, Sarawak Borneo.

29. **Stigmatomyces laticollis** Thaxter, Proc. Am. Ac. of Sc., 53., 1918, p. 729. — Subhyalinus, receptaculo breviusculo, cellulis subaequalibus septo obliquo separatis, basali infra angustata, cellula pedicellari appendicum parum latiori cellulae pedicell. perithecii cui approximata; axe appendicum 6-9 cellulis circiter efformato, basali parva brunnea, depressa parte distali latiore; cellula pedicellari perithecii e cellula appendicum parum superata; ventre asym- 3798

metrico, in parte distali latiore; parte distali perithecii indifferentiata, valida, diametro undique subaequali, apice late rotundato extus incurvato; peritheciis 100-105 × 28-32 (ventre) × 14 (parte distali); sporis circ. 18 × 2,5; appendicibus circ. 40-50 μ, receptaculo 40-50 μ, totus fungus 150-175 μ long.

Hab. in abdomine L i m o s i n a e sp. (Dipt.), Kamerun Africa occ. trop. — *St. affini* ventris conformatione proxima, sed differt regione cellulae basali longiori, et parte distali uniformiter crassa, et apice late rotundato obtuse curvato.

30. **Stigmatomyces longicollis** Thaxt., Proc. Am. Acad. 1917, p. 660. 3799
Hab. in artubus poster. et abdomine L i m o s i n a e sp., Balaclava, Clarkstown Jamaica. — Sporidia 18-20 × 2,5; perith. 245-450 μ venter 56 × 35-36 × 26-30; rostrum 190-380 × 14; apex 22; appendix 90-120 μ; recept. 40-45 × 18-20; long. tot. ad apicem perithecii 300-525 μ.

31. **Stigmatomyces crassicollis** Thaxt., Proc. Am. Acad. 1917, p. 661. 3800
Hab. in abdomine et artubus L i m o s i n a e sp., Balaclava, Mandeville Jamaica. — Sporidia 20-22 × 2; perith. 140-325 μ, venter 35-60 × 38-64; rostrum 350 × 25, apex 18 μ; appendix 35-70; recept. 50-70 × 22-35; long. tot. ad apicem perithecii 200-430 μ.

32. **Stigmatomyces affinis** Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, 3801
p. 723. — Infra hyalinus, infra cellula pedicellari pallide flavidus; habitu rigido, recto v. curvulo, receptaculo basim versus conoideo-attenuato, cellula basali aliquanto longiore, pede parvo, supra brunneo-fumoso; cellula pedicellari perithecii et appendicum e latere horizontaliter dispositis subaequalibus, secundaria statura minori sed parum longiore; axe appendicum extus convexo plerumque 8-cellulari; ventre perithecii crassiusculo infra medio plus v. minus abrupte inflato, supra quadrilobulato apice papillato; peritheciis 95-105 × 28-32, sporis circ. 25 × 3,5, appendicibus circ. 50 μ long., receptaculo 35-50 × 16, totus fungus 150-175 μ long.

Hab. in L i m o s i n a e sp. [Dipt.], Kamerun Africa occ. trop. — *St. papuano* proximus, sed differt caracteribus perithecii et situ cellulae pedicellaris.

33. **Stigmatomyces platensis** Speg., Laboulb. Arg. p. 676, fig. 208. — 3802
Parvus, totus hyalinus; cellula basali obconica, subbasali tumida breviore, androsticho breviter pedicellato 10-12-antheridiifero, antheridiis inferis fumosis majoribus, ceteris hyalinis cito minoribus; perithecio gynostico 3-cellulari, pedicello androstichi adnato, imposito, sublageniformi, parte sporifera ovato-tetragona sursum abrupte

valideque contracta grosse 4-gibbosa, rostro ostiolari subcylindrico, leniter arcuato, ostiolo conico angustiore, ore obliquo acuto donato, coronata.

Hab. in alis et abdomine muscae parvulae, Limosinae, sp., La Plata Argent. — Perith. sine ped. 75-80 × 20-22; recept. 50-55 × 20; alt. tot. 140-150 µ.

34. **Stigmatomyces papuanus** Thaxt., Syll. XVI p. 681. — *Stigm. italicus* Speg. 1915. — var. **leiostoma** R. Maire, Bull. Soc. Hist. Nat. Afrique du Nord, t. 11., 1920, Extr. p. 17, fig. 4. — A typo differt perithecio apice levi obtuso, appendice mascula ad septa omnia constricto. 3803

Hab. in Leptocera (Limosina) fontinalis Fall. [Dipt.], Djurdjura or. prope Tizi-n-Kouilae, Algeria Africa bor.

35. **Stigmatomyces excavatus** Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, p. 742. — Erectus, v. leniter sigmoideus; appendicibus longis, gracilibus, attenuatis, plerumque rectis cum antheridiis extus positis v. quandoque lateralibus; receptaculo crasso tunicato, brevi crasso; cellula pedicellari appendicum lata, circa cellulam basalem prominentiam rotundatam efformanti; perithecio gracili acuminato, ventre triplo v. quadruplo longiore quam latiore; perithecio 140-200 × 20-28, sporis circ. 25 × 3, regione basali et pedicellari 35 × 22, receptaculo 80 × 25, appendicibus 70-95 × 7, eorum cellula pedicellari 35-45 × 10-15, totus fungus 280-335 µ long. 3804

Hab. in abdomine speciei gen. Notiphilae affinis [Dipt.], Kamerun Africa occ. trop.

36. **Stigmatomyces Notiphilae** Thaxt., Proc. Amer. Acad. 1917, p. 662. 3805

Hab. in abdomine et artubus Notophilae, Balaclava, Jamaica et Grenada. — Sporidia 36 × 4,5; perith. 185-200 × 30-35; cell. bas. 30-40 × 26-28; recept. 70 × 25; long. tot. 325-400 µ; appendix 65-75 × 10.

37. **Stigmatomyces ortalidanus** Thaxter, Proc. Amer. Ac. of Sc., 53., 1918, p. 744. — Longus et gracilis, rectus v. curvulus; cellula basali receptaculi acutata infra curvula crassitudine secundaria tegumenti demum brunneo nigrescenti et crassitudine primaria flavescenti; appendicibus longis, angustis et in parte distali attenuatis 8-10 cellulis axialibus efformatis; ventre perithecii demum flavobrunnescenti triplo et ultra longiore quam latiore, recto subsymmetrico; venis colli et ventris saepe conspicuis corrugatis quandoque aegre visibilibus sed aetate majoribus; regione basali et pedicellari perithecii 109-210 × 30-35, ventre 90 × 105 × 30-38, collo 3806

122 × 20-28 v. minus, apice 25-30 × 12, sporis circ. 45 × 4, appendicibus 106-125 μ long. basi 15 μ cr., cellula pedicellari 50-60 × 14-18, receptaculo 250-280 × 32, totus fungus usque 740 × 35-40.

Hab. in abdomine Ortalidaearum sp. (Dipt.), Kamerun Africa occ. trop.

38. **Stigmatomyces inflatus** Thaxt., Proc. Amer. Acad. 1917, p. 664. 3807

Hab. in superf. sup. abdominis Sapromyzae sp., Orizaba Mexico (Mann). — Sporidia 18 × 3,5; perith. basis et pes 54-62 × 18-23, venter 55-62 × 38-45; rostrum 90-110 × 15, apex 26-30 × 15; appendix 55-62 μ; recept. 100-120 × 18; long. total. ad apicem perith. 310-390.

39. **Stigmatomyces hexandrus** Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, p. 746. — Habitus rigidus erectus; receptaculo hyalino recto v. curvulo, cellula basali dimidium subbasali longiore; axe appendicum tricellulari, inferioribus antheridia bina tertia unum tantum gerentibus, antheridium sextum terminali uno latere caracteristice inflato spinoso; superficie ventralis minute et vix conspicue granulosa, collo ventris longiore medio leniter constricto; perithecio 120-190 × 24-28, sporis 28-30 × 3,5, appendicibus 55 × 10, receptaculo 120-190 × 24-28, totus fungus usque 280-300 long. vel etiam 370 × 42. 3808

Hab. ad crura et abdominem Trypetidearum sp. [Dipt.], Kamerun Africa occ. trop. — *S. separato* valde affinis.

40. **Stigmatomyces separatus** Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, p. 747. — Habitus rigidus erectus, collo et apice leniter incurvato; receptaculo hyalino, subisodiametrico, v. leniter ad apicem acutato; cellula pedicellari appendicum leniter subbasalis latiori, circiter duplo latiori quam longiori, axe quinquecellulari, duobus inferioribus plerumque tria antheridia tertia et quarta duo, quinta unum tantum gerentibus; cellula pedicellari perithecii tantum longa quam lata, basali subaequali, ventre recto infra leniter et symmetrice inflato, superficie leniter granulosa, collo subaequilongo leniter angustato vel subisodiametrico, apice aegre distinguibili; perithecio 155-176 × 28-35, sporis 30 × 3,5, appendicibus 50-65 × 7, receptaculo 70-80 × 18-20, totus fungus 210-280 μ long. 3809

Hab. in capite Trypetidearum sp. [Dipt.], Kamerun Africa occ. trop.

41. **Stigmatomyces Euconni** Picard, Bull. Scient. France Belgique t. 50., 1916-1917, p. 447, tab. VI fig. 4. — Hyalina sed perithecia et antheridia brunneo-rubescentia; receptaculo parum manifesto e duo- 3810

bus cellulis parvis omnino hyalinis efformato, subbasali apice pedunculum perithecii e latere appendicem gerentem; pedunculo perithecii tenui elongatissimo; perithecio fusoideo-inflato, 125-135 μ longo; appendice (70-75 μ longa) 3 antheridia gerente, pedunculo brevi rotundato pallide rubescenti ad receptaculum lateraliter inserto, apice cellulis tribus constituto, omnibus antheridium singulum ovoideum gerentibus, antheridio terminali lateraliter spinulifero. Totus fungus 220-230 μ long.

Hab. ad crura Euconni Wetterhali (Coleopt.), Lattes (Herault), Gallia (LAVAGNE).

42. **Stigmatomyces Aciurae** Thaxt., Proc. Amer. Acad. 1917, p. 668. 3811

Hab. in artubus et abdomine Aciurae sp. et Eusinae sp., Mandeville, Jamaica. — Sporidia 50-55 × 4,5; perith. 64-70 × 78, rostr. 55-75 × 24, appendix 55 × 18, cell. bas. 20 × 12, pes 35 × 12; recept. 150-350 × 18-27., long. tot. ad apicem perith. 330-550 μ.

43. **Stigmatomyces Anoplischii** Thaxt., Proc. Amer. Acad. 1912 p. 176, Speg. Lab. Arg. fig. 204. 3812

Hab. in elytris Anoplischii sp., Buenos Aires et La Plata Argent. et Diarterii pullati, Montevideo, Buenos Aires, Sta Catalina et La Plata, Arg. (SPEGAZZINI). — Sporidia 60-65 × 8; perith., incluso pede (8 μ), 280-330 × 45; appendix, sine pede, 50-60 × 25; antherid. 25 × 12; recept. incl. cell. pedunc. appendicis 50-55 × 26; longit. tot. ad apicem perith. 310-390 μ ad apicem appendicis 130 μ.

44. **Stigmatomyces Clinocerae** Thaxt., Proc. Am. Acad. 1917, p. 659. 3813

Hab. in abdomine infer. Clinocerae binolatae, Tecoma Washington Amer. bor. — Sporidia 18 × 2,8; perith. 140-170 × 30-36; appendix longior 76 × 8-10; receptac. 60-88 × 14-18; long. tot. ad apicem perithecii 260-300.

45. **Stigmatomyces Diapetis** Thaxt., Proc. Am. Acad. 1917, p. 657. 3814

Hab. in Diapetis sp., Mandeville, Jamaica, Panama, Trinidad. — Sporidia 38-40 × 3,5; perith. 120-150 μ, venter 50-60 × 35-50; appendix 50-70 × 20; recept. 70-90 × 17-20; long. tot. 280-300 μ.

46. **Stigmatomyces Eusinae** Thaxt., Proc. Amer. Acad. 1917, p. 665. 3815

Hab. in variis partibus Eusinae sp., Mandeville, Jamaica. — Sporidia 27 × 3,6; perithecii pes et pars basil. 60-70 × 35, venter 75-100 × 50-55, rostr. 46-60 × 18-20, apex 15 × 18-20; appendix 80-55 × 12,5; recept. 80-150 × 20; long. tot. ad apicem perithecii 300-400 μ.

47. **Stigmatomyces verruculosus** Thaxt., Proc. Am. Acad. 1917, p. 667. 3816
Hab. in abdomine Eusinae sp., Mandeville Jamaica et Grenada. — Sporidia 28 × 4; perith. 35 × 32, venter 48-55 × 40, rostrum 62-75 × 18, apex 19-21 × 14; appendix 60 μ, cell. basil. 21 × 7,5, pes 27 × 10,5; long. tot. ad apicem perithecii 280-312 μ.

48. **Stigmatomyces arophilus** Speg., Laboulb. Arg. p. 677, fig. 209. — 3817
Parvulus receptaculo fumoso, cellula basali triangulari, subbasali anguste segmentiformi, pedicello peritheciali brevi, perithecio subcylindraceo recto apice abruptiuscule in ostiolo cylindrico infuscato leniter incurvato oreque subtruncato producto; appendice erecta simplice subgracili 5-6-mera, articulis 1-4 superis monantheridiatis.
Hab. pervulgatus in abdomine Heterotopis formicetorum in nidis Attae Lundi, Sta Catalina B. A. Florencio Varela et La Plata, Arg. — Perithec. c. ped. 80-85 × 15-18; app. 25-50 × 5-8; alt. tot. 100-120 μ.

49. **Stigmatomyces montevideensis** Speg., Laboulb. Arg. p. 675, fig. 207. 3818
Majusculus; cellulis receptaculi angustis, elongatis vix fumosis; androsticho 6-7-mero infuscato, ventre antheridiorum paria 5 fulcente; perithecio lanceolato-fusoideo obsolete subtoruloso subhyalino, basi fuscescente, pedicello angusto longiusculoque fulto.
Hab. in abdomine Latbrobii dimidiati, Montevideo — Perith. 185-200 × 36-38; recept. 125-130 × 15-18; alt. tot. 350-360 μ.

50. **Stigmatomyces curvirostris** Thaxt., Proc. Amer. Acad. 1917, p. 671. 3819
Hab. ad apicem abdomnis Paralimnae ciliatae, Balaclava, Mandeville et Clarkstown Jamaica. — Sporidia 28 × 2,5; perith. 195-225 × 30; appendix 80-90, pes 100-118 × 12; recept. 58-70 × 15; long. tot. ad apicem perith. 300-390 × 30-40.

51. **Stigmatomyces rostratus** Thaxt., Proc. Amer. Acad. 1917, p. 672. 3820
Hab. in abdomine Paralimnae decipientis in Jamaica et Grenada. — Sporidia 28 × 3, perithecii venter 100-115 × 35-45, rostrum 90-100 × 16-18; recept. 80-95 × 22-26; appendix 75-85, pes 35 × 16, cell. basil. 28-30 μ, long. tot. ad apicem perithecii 300-350 μ.

52. **Stigmatomyces Paralimnae** Thaxt., Proc. Amer. Acad. 1917, p. 674. 3821
Hab. in abdomine, artubus et alis Paralimnae ciliatae, Arkansas Jamaica et Grenada. — Sporidia 35 × 4; perith. venter 60-75 × 22-28; long. a pede ad basim ventris 50-70 × 22-30; appendix 40-45; long. tot. ad apicem perithecii 150-175 μ.

53. **Stigmatomyces jamaicensis** Thaxt., Proc. Am. Acad. 1917, p. 676. 3822

Hab. in alis et artubus Paralimnae ciliatae, Jamaica. — Sporidia 30 × 4; perith. 80-115 × 28; appendix 60-75 × 12, pes 30-50 × 10-12, cell. basil. 8-10 μ; recept. 38-46 × 15-18; long. tot. ad apicem perith. 135-195 μ.

54 **Stigmatomyces brevicollis** Thaxt., Proc. Am. Acad. 1917, p. 677. 3823
Hab. in capite, thorace et artubus Psilopae sp., Balaclava Jamaica. — Sporidia 35 × 3,5; perith. 85-95 μ venter 55-64 × 28-34, rostr. 18 μ, appendix 50-52 × 8; recept. 42-54 × 14-16; long. tot. ad apicem perith. 140-170 μ.

55. **Stigmatomyces indentatus** Thaxt., Proc. Amer. Acad. 1917, p. 678. 3824
Hab. in superf. super. abdominis Psilopae sp., Arkansas, Orizaba Mexico. — Sporidia 24 × 4; perith. 130-147, venter 70-77 × 35-42; recept. 85-125 × 22; appendix 42; long. tot. ad apicem perithecii 210-315 μ.

56. **Stigmatomyces Ochtheroideae** Thaxt., Proc. Amer. Acad. 1917, p. 679. 3825
Hab. in superf. sup. thoracis Ochtheroideae spp., Trinidad, Panama (Rover), Grenada. — Sporidia 36 × 4; perith. 100-110 × 30-35; appendix 45 50 × 16; receptaculum 55-65 × 14-16; long. tot. ad apicem perith. 150-175 μ.

57. **Stigmatomyces compressus** Thaxt., Proc. Am. Acad. 1917, p. 681. 3826
Hab. in artubus et alis Psilopae sp., Mandeville, Balaclava Jamaica et Ochtheroideae glaphropodae, Mandeville et Porus Jamaica. — Sporidia 30 × 3,8; perith. 120-140 × 38-42; appendix 55 μ; recept. 70-100 × 16-20; long. tot. ad apicem perithecii 220-310.

58. **Stigmatomyces micrandus** Thaxt., Monogr. Lab. II p., t. 46 fig. 24— 3827
var. **Atissae** Thaxt., Proc. Am. Acad. 1917, p. 682.— A typo differt statura minore, 180-200 μ long.—*Hab.* in capite, thorace, antennisque minutae, atrae speciei Atissae in India occid.

59. **Stigmatomyces Psilopae** Thaxt., Proc. Amer. Acad. 1917, p. 682. 3828
Hab. in insecto Psilopae sp. in Jamaicae plur. loc. et Grenada. — Sporidia 35 × 3,5; perith. venter 85 × 42-62, rostrum 70-140 × 18; recept. 78-260 × 20-25; appendix 52 × 14; longit. tot. ad apicem perith. 300-540.

60 **Stigmatomyces Ilytheae** Thaxt., Proc. Amer. Acad. 1917, p. 683. 3829
Hab. in thorace, artubus anterior. Ilytheae spp. in Jamaica, Grenada, Kamerun, Borneo et Maine, in formis variis — In typo.: sporidia 35 × 3,5; perith. 155-192 μ, venter 70-98 × 28-42; appendix 56 × 16; recept. 100-110 × 30; long. tot. ad apicem perithecii 210-300 μ.

61. **Stigmatomyces ambiguus** Thaxt., Proc. Amer. Acad. 1917, p. 689. 3830
Hab. in alis Ochtheroideae, Grenada et Venezuela. — Sporidia 35 × 3,5; perith. 140-155, venter 60-70 × 30-32; recept. 88-105 × 21; appendix 60 × 15; long. tot. ad apicem perith. 220-280.

62. **Stigmatomyces Ochtherae** Thaxt., Proc. Amer. Acad. 1917, p. 691. 3831
Hab. in superf. sup. abdominis Ochtherae, Balaclava Jamaica. — Sporidia 35 × 3,5; perith. 100 × 31-35; appendix 70-85 × 15-20; recept. 66-85 × 18-25; long. tot. ad apicem perith. 160-180 μ.

63. **Stigmatomyces borealis** Thaxt., Proc. Amer. Acad. 1917, p. 692. 3832
Hab. in artubus Parydrae imilantis, Kittery Point, Maine. — Sporidia 34 × 3,5; perith. 96-110 × 30-40; appendix 48 μ; recept. 60-85 × 22-24; long. tot. ad apicem perithec. 150-200 μ.

64. **Stigmatomyces lingulatus** Thaxt., Proc. Amer. Acad. 1917, p. 693. 3833
Hab. in superf. sup. abdominis Parydrae humilis, Balaclava, Jamaica. — Sporidia 38 × 4,5; perith. venter 70-80 × 40, long. 90-100 × 14-18; append. 75-80 × 12-14; cell. basil. 24 × 10, pes 30 μ, recept. 115-135 × 24-28, long. tot. ad apicem perith. 300 μ.

65. **Stigmatomyces pinguis** Thaxt., Proc. Amer. Acad. 1917, p. 694. 3834
Hab. in superf. inf. alae sinistr. Parydrae pinguis, Fayetteville Arkansas. — Sporidia 28 × 4 ×, perithec. 120-135 μ, venter 65-78 × 40-55, rostr. 16 μ cr.; appendix 60 × 12; recept. 65-98 × 22-26, long. tot. ad apicem perithecii 200-260

66. **Stigmatomyces protrudens** Thaxt., Proc. Amer. Acad. 1917, p. 695. 3835
Hab. in thorace, alis et abdom. sup. Parydrae pinguis. Fayetteville Arkansas. — Sporidia 30 × 4; perith. 120-140 × 30-45, ejus processus 16 μ; receptac. 70-100 × 20; appendix 65-70 × 15, pes 25-27 × 12-14; long. tot. ad apice perith. 225-275.

67. **Stigmatomyces Parydrae** Thaxt., Proc. Amer. Acad. 1917, p. 696. 3836
Hab. in artubus, alis et thorace Parydrae quadritubercu latae, Fayettevilie, Arkansas. — Sporidia 30 × 4; perith. venter 60-75 × 35-40, basis et pes 18 × 27; recept. 45 × 20-22, long. maxima 80 μ; appendix 60-70 × 16; long. tot. ad apicem perithecii 180-225 μ.

68. **Stigmatomyces Sigaloessae** Thaxt., Proc. Amer. Acad. 1917, p. 698. 3837
Hab. in superf. sup. abdominis Sigaloessae, Mandeville Jamaica. — Sporidia 28 × 4; perith. basis et pes 18-20 × 32-35, venter 75-82 × 42-47, rostr. 66 × 46-51, appendix 45-50 × 8-9, pes 16-18 × 8; recept. 72-156 × 23-28; long. tot. ad apicem perithecii 225-310 μ.

69. **Stigmatomyces Leucophengae** Thaxt., Proc. Am. Acad. 1917, p. 699. 3838

Hab. in thorace et abdomine Leucophengae sp., Fayetteville Arkansas. — Sporidia 28 × 3,5 ; perith. basis et pes 30 × 20, venter 58-65 × 20-24 ; rostrum et apex 23-27 × 11,5 ; appendix 55-60 × 8 ; recept. 26-30 × 24 ; long. tot. ad apicem perithecii 150-210 × 27.

70. **Stigmatomyces Streblae** Thaxt., Proc. Amer. Acad. 1917, p. 700. 383

Hab. in artubus et alis Streblae vespertilionis ad vespertiliones, Venezuela (CARRICKER). — Sporidia 28 × 3,5 ; perith. 95-105, rostr. 35 × 16, venter 50-56 × 24-28 ; appendix 28 × 18 ; recept. 65-80 × 16-20, longit. tot. 170-200 μ.

71. **Stigmatomyces Nycteribiidarum** Thaxt., Proc. Amer. Acad. 1917, 384 p. 702.

Hab. in abdomine infer. Nicteribideae spec. parasiticae in Antibaeo Grenadino, Grenada (BORNES). — Perith. 190-215 μ venter 110-120 × 45-54, rostr. 70 × 22 ; appendix 50 × 20-24 ; recept. 85-105 × 30-35 ; long. tot. ad apicem perithecii 330-365 μ.

72. **Stigmatomyces Lasiochili** Thaxt., Proc. Amer. Acad. 1917, p. 703. 384

Hab. in artubus etc. Lasiochili pallidi, Grand Etang Grenada. — Sporidia 40-45 × 3,5 ; perith. 135-160 × 30-35 ; appendix 50-55 μ ; recept. cum pede 30-35 × 16 ; long. tot. ad apicem perithecii 175-210 μ.

73. **Stigmatomyces fuscipes** Speg., Laboulb. Arg. p. 675, fig. 206. — 384 Mediocris, cellulis receptaculi angustis, basali elongata, subbasali brevi, fuscis ; androsticho 4-5-mero angusto fusco, ventre paria antheridiorum tria gerente ; perithecio subfusoideo-lanceolato fere hyalino (basi excepta subolivascente), apice leniter annulatim constricto atque in ostiolo subcylindraceo-conoideo producto, pedicello brevi latiusculo fumoso fulto.

Hab. in abdomine Scopaei lugubris in ins. Santiago La Plata. — Perith. sine ped. 140-150 × 28-30 ; recept. 60-65 × 10-17 ; alt. tot. 235-260 μ.

74. **Stigmatomyces Stilici** Thaxt., Proc. Amer. Acad. 1915, p. 35. 384

Hab. in abdomine et elytris Stilici ceylonensis, Peradeniya Ceylon. — Perith. 125-195 × 30-40, pes 40-60 × 20-23 ; appendix 45-50 μ, ejus pes 15-20 μ ; long. tot. ad apicem perithecii 200-310 μ ; sporidia 35 × 4.

75. **Stigmatomyces Coccinellidae** Thaxt., Proc. Am. Acad. 1917, p. 704. 38

Hab. in elytris Coccinelidae minutae speciei, Grenada (BORNES), Mandeville Balaclava, Jamaica, Mindanao Ins. Philipp., Sarawak Borneo. — Sporidia 45 × 3,5 ; perith. 85-110 × 24-30, apex

22 × 20-18 × 25; appendix ad apicem term. antheridii 35-40 μ; antheridia 18 μ; receptac. 20-25 × 10-12; long. tot. ad apicem perithecii 120-140 μ.

ILYTHEOMYCES Thaxt., Proc. Amer. Acad. 1917, p. 705 (Etym. a *Ilythea*, genus Dipterorum). — Receptaculum compactum, bicellulare, pes et basis non discreta; cellula subbasilaris apice cellulam pedunculatem perithecii et lateraliter appendicem gerens. Appendix constans ex axi cellularum superpositarum numero indefinito; antheridia majuscula, binata, colorata; cellulae terminales axis ramulos complicatos extus intusque gerentes; perithecia normalia, basis et pes bene evoluta, apice varie appendiculigera.

1. **Ilytheomyces elegans** Thaxt., l. c. p. 707. 3845

Hab. in superficie inf. dextera abdominis Ilytheae sp. (Dipt.), Clarkestown et Balaclava Jamaica, Grenada (Brues) et Panama (River). — Sporidia 25 × 2; perithecium 52-75 × 16-18, ejus appendix 75-140 × 4-5; appendix 50-80 μ; recept. 10-14 × 12-14; long. tot. ad apicem perith. 90-145 μ.

2. **Ilytheomyces sarawakensis** Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, p. 716. — *Ilytheom. eleganti* valde affinis et probabiliter varietas ejusdem tantum sistit. — Totus fungus 100-120 μ long.; peritheciis e basi ascigera 50-75 × 14-20, sporis circ. 22 × 2-5, regione basali et pedicellari 20-35 × 18-22, receptaculo 10 × 12, appendicibus 50-60 μ long. 3846

Hab. in inferiori parte abdominis Ilytheae sp., Sarawak Borneo.

3. **Ilytheomyces kamerunensis** Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, p. 715. — Cellula basali latiuscula, omnino hyalina, quadrangulari, ventricosa, subbasali subtrigona, minori subventricosa et uno cum pede nigricanti; appendicibus numerosis, ramulis crassiusculis, antheridiis binis, crassis, rectis, brunneis; cellula pedicellari perithecii parva et angusta, omnino opaca cum regione basilari abnormiter efformata perithecii longiore; cellula pedicellari secundaria infra nigro-marginata; cellulis inferioribus perithecii extus leniter plicatis, perithecia apice obscuriori indistincto abrupte angustato, 63-70 × 17, sporis 20 × 2,5; regione cellulae basilaris 90-100 × 18-20, cellula pedicellari perithecii 8 × 8, receptaculo 15 μ, appendicibus 56-68, totus fungus 140-175 μ long. 3847

Hab. in inferiori parte abdominis Ilytheae sp., Kamerun Africae occ. — Proxima *I. sarawakensi* a qua differt caracteribus

cellulae basilaris, perithecii etc.

4. **Ilytheomyces manubriolatus** Thaxt., Proc. Amer. Acad. 1917, p. 708. 3848
Hab. in alis I l y t h e a e sp., Grenada, Jamaica, Trinidad, Panama (Rover). — Sporidia 22 × 2; perith. 40-50 × 13-16, apex 12 μ, appendix ejus 40-60 × 3; processus cell. secund. 8-14 μ; appendix 30, ramuli longiores 45 × 5; recept. et pes 15; long. tot. ad apicem perithecii 75-85 μ.

5. **Ilytheomyces panamensis** Thaxt., Proc. Amer. Acad. 1917, p. 710. 3849
Hab. in superf. sup. alae sinistr. I l y t h e a e spec., Bocas del Toro Panama. — Sporidia 28 × 2,5; perith. 36-40 × 14, pars basalis 12-13,5 × 12; appendicis axis 20 μ, ramuli longiores 28 μ, antheridia 12 × 3,5, protrusio e cellula subbasil. receptaculi 18 × 7; long. tot. ad apicem perith. 58-68 μ.

6. **Ilytheomyces minusculus** Thaxt., Proc. Amer. Acad. 1917, p. 711. 3850
Hab. in ala dext. I l y t h e a e sp., Clarkstown Jamaica. — Sporidia 22 × 2; perith. 48-50 × 15, pes 9 × 7,5, pars super. hyal. 18 × 14, processus term. 15 × 5; appendicis axis 30 μ; ramuli longiores 35 μ, antheridia 12 μ; long. tot. ad apicem perithecii 70-90.

7. **Ilytheomyces lingulatus** Thaxt., Proc. Amer. Acad. 1917, p. 712. 3851
Hab. in ala dext. I l y t h e a e sp., Grenada, Jamaica, Trinidad, Panama (Rover). — Sporidia 35 × 3; perith. 35 × 14-17, processus linguiformis 16-18 × 5, pars libera 9-10 μ; appendicis axis ater 25-30 μ, ramuli longiores 35 × 3,5; antheridia 18; long. tot. ad apicem perithecii 55-65 μ.

8. **Ilytheomyces major** Thaxt., Proc. Amer. Acad. 1917, p. 713. 3852
Hab. in ala sinistra I l y t h e a e, Bocas del Toro Panama. — Sporidia 45 × 3; perith. 58-68 × 18, processus linguiformis 18 × 8; basis 25 × 10; appendix axis 35 μ, ramuli longiores 55 × 5-6; antheridia 12 × 4,5; long. tot. ad apicem perithecii 90-110.

9. **Ilytheomyces calycinus** Thaxt., Proc. Amer. Acad. 1917, p. 714. 3853
Hab. superf. superiori alae sinistrae I l y t h e a e sp., Battersea et Clarkstown Jamaica. — Sporidia 25 × 2,5; perith. 60-68 × 17-20, apex 15-17 × 15-17, pes et basis 18 × 12; appendicis axis 25-35 μ ramulus longior 20 μ; antheridia 14 μ; long. tot. ad apicem perith. 90-110 μ.

10. **Ilytheomyces falcatus** Thaxter, Proc. Amer. Ac. of Sc., 53., 1918, 3854
p. 714. — Plus minus conspicue curvatus. Cellula basali infra insertione appendicum abrupte prominenti, cellula subbasali latiori hyalina; axe appendicum divergens e cellulis 4 vel 5 vix visibilibus extus nigricantibus efformato; cellula subbasali abrupte la-

tiori quam basali interiori parte cellulis androphori gerenti, caeteris cellulis axialibus extus brunneo-nigricantibus extus curvis : cellula pedicellari perithecii hyalina, breviuscula ; superficie perithecii brunneo-purpurascenti granuloso-maculata, apice leniter obscuriori ; perithecio 55-68 × 15-18, regione pedicellari et basali 35-50 × 15, sporis circ. 25 × 2,5 ; appendicibus 50 μ circ. long. ramulis longioribus 40 × 6,5, totus fungus 100-120 μ long.

Hab. in superiori parte abdominis Ilytheae sp., Kamerun Africa occ. — *Il. majori* proxima, sed differt perithecio punctato apice prominenti-incurvato.

11. **Ilytheomyces obtusus** Thaxt., Proc. Amer. Acad. 1917, p. 715. 3855

Hab. ad basim alarum Ilytheae sp., Clarkstown Jamaica.— Sporidia 30 × 2,5 ; perith. 48 × 18-20 ; appendicis axis 30 μ, ramulus longior 35 ; cell. subbasil. 6-7 μ ; long. tot. ad apicem perithecii 80 μ.

12. **Ilytheomyces anomalus** Thaxt., Proc. Amer. Acad. 1917, p. 716. 3856

Hab. in artu poster. Ilytheae, Clarkstown, Jamaica. — Sporidia 28 × 2,8 ; perith. 50 × 16 × 24, pes et cell. basil. 32-60 × 13-17 ; recept. incl. pede 28 μ, axis appendicis 50 μ ; antheridia 16 μ ; long. tot. ad apicem perith. 100-140 μ.

13. **Ilytheomyces simplex** Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, 3857 p. 718. — Perithecium et appendices obscure brunneae. Cellula basali receptaculi pede conjuncta, minuta, aegre perspicua margine superiori hyalino excepto; appendicibus crassis subclavatis, apice ramis brevibus abortivis praeditis, axe e quinque cellulis subinaequalibus efformato ; cellula pedicellari perithecii brevi et crassa, hyalina, cellula basali hyalina v. supra brunneo tincta, cellula pedicellari secundaria extus prominula ; perithecio obscure brunneo, asymmetrico infra inflato, apice abrupte leniterque angustato, pallidiori, 60 × 18, sporis 15 × 2, appendicibus 35 × 8, totus fungus 90-97 μ long.

Hab. ad crura Ilytheae sp., Sarawak Borneo. — *I. anomalo* valde affinis sed statura minori et caracteribus appendicum et peritheciorum diversus.

TERATOMYCES Thaxt. — Syll. XI p. 454, XIV p. 735, XVI p. 690, XXI p. 4 et 12.

1. **Teratomyces atropurpureus** R. Maire, Bull. Soc. Hist. Nat. Afrique 3858 du Nord, t. 11., 1920, Extr. p. 20, tab. II fig. 13-17. — Receptaculo tricellulari ; cellula basali supra unguem nigrum subhyalina;

cellula subbasali, obconica, apice nigricanti; cellula distali latissima, obconica, inferne nigricanti, superne subhyalina v. dilute fusco-purpurea; septo superiore intense fusco-purpureo, cellularum appendiciferarum coronam et perithecii pedicellum gerenti; appendicibus masculis eis *T. Actobii* simillimis, sed usque ad apicem fusco-purpureo-septatis, adultis dilute fusco-purpureis. Peritheciis dilute fusco-purpureis, elongato-subfusiformibus, symmetricis, apice rotundatis; ostioli regulares labiis subhyalinis vix prominulis; perithecii pedicello subhyalino, unicellulari, subcylindrico, appendicibus breviore, perithecio subaequilato; cellulis basalibus 3, fusco-purpureis; cellulis ascogenicis 2. Ascis 4-sporis Ascosporis basi apiculo uncato, apice calyptra gelatinosa praeditis, 1-septatis, loculo superiore majore. — Totus fungus 215-220 μ alt.

Hab. in Actobio signaticorni in Mauretania, Africa boreale.

STEPHANOMYCES Speg., Lab. Arg. (1917) p. 671.— Laboulbeniineus, peyritschiellaceus, monoicus; receptaculo hippocrepice coroni-v. flabelli-formi, e cellula basali nigro-unguiculata majuscula suborbiculari, pluribus subbasalibus radiantibus subimbricatis composito, cellulis marginalibus utrinque praeextimis androsticho psalliato trimero appendiculato ornatis, ceteris paraphysibus filiformibus dimeris saepius apice minute psalliato donatis; perithecio e cellula centrali e latere psalliato-cornuta exsurgente, pedicellato ovato laevi; nucleo ascogenico solitario; ascis bisporis; sporis hyalinis geminatis acicularibus obsolete excentriceque 1-septatis; antheridiis solitariis parvis ad apicem androstichi insidentibus inter paraphyses et eaurum basi adnatis.

1. **Stephanomyces elegantissimus** Speg., l. c. p. 671, fig. 203. — Parvus, totus plus minusve infuscatus, perithecio obliquo fere ovato-dimidiato, pedicello recto nigro opaco subaequilongo fulto, cornu basilari pedicelli, paraphysibus extimis sterilibus nec non androstichis basi grosse nigro psalliatis; receptaculo primo conchoideo-contracto, dein flabellato-expanso, cellulis subbasalibus circiter 15 marginalibus, extimis majoribus difformibus nigris opacis. 3859

Hab. in toto corpore Typhaeae fumatae, La Plata. — Perith. sine ped. 45-50 × 25-26; recept. 35 × 40; alt. tot. 100-120 μ.

TRENOMYCES Chatt. et Pic. — Syll. XXII p. 17.

1. **Trenomyces australis** Speg., Laboulb. Arg. p. 679, fig. 211. — Ma- 3860

sculi et foeminei saepius dense commixti coacervatique, substratum ambitu nigrificantes, utriusque appendice receptaculari pucciniiformi pallide olivascente crasse tunicata cellula apicali conoideo-submucronata; peritheciis angustis sursum vix incrassatis, apice breviter conoideis, ostiolo truncato trilobulato deorsum in pedicello non v. vix angustiore parum elongato obsolete limitato, productis.

Hab. in thorace Menópi sp. (pediculi) in Phalerocorace imperiali (avi), La Plata — app. 28-30 × 15; anther. 40 × 11 (mas); app. 25-28 × 15; perith. sine ped. 128-150 × 20 (fem.).

2. **Trenomyces platensis** Speg., Laboulb. Arg. p. 680, fig. 213. — Apen- 3861
dices subparvae, vix chlorinae, cellula supera conoidea acuta; antheridia pauca ventricosa; perithecia parum numerosa majuscula elongata, primo recta dein arcuato-diflexa, parte ascophora subfusoidea apice conica, ostiolo truncato trilobulato donata, stipite parum breviore conspicue angustiore fulta.

Hab. frequens in toto corpore Docophori sp. (pediculi) in Aramo scolopaceo (avi), Punta Lara, La Plata Arg.— App. 10 × 6-7; anther. 28-30 × 12-13 (mas); app. 18-20 × 10-12; perith. sine ped. 175-180 × 25-30; perith. ped. 125-150 × 10-15 (fem.).

3. **Trenomyces Lipeuri** Thaxt., Proc. Amer. Acad. 1912, p. 383. — *Mas.* 3862
Appendicibus horizontalibus, cellula extima quam basilari duplo longiore; longit. ab apice appendicis ad ultimam corticatam 42 μ; appendice 15 × 9; antheridio 35 μ longo, incluso pede; tubis efferentibus 4 μ long., cetero corpore 18 × 20 — *Femina:* perithecio 90-110, incluso pede; corpore 60-80 × 20-28; rhizoide 90-100 μ long., tenuiore 7 μ cr.

Hab. in partibus variis Lipeuri sp., ad « Buzzard », Guatemala, Lipeuri celeris in California.

4. **Trenomyces Lacmobothrii** Thaxt., Proc. Amer. Acad. 1912, p. 384.— 3863
Mas: Cellula basilari 18 × 18; appendice 28 × 18; antheridiis 45-50 μ long. incluso pede; corpore 25 × 12, incluso tubo efferenti — *Femina:* appendice latiuscula, cellulis subaequalibus; peritheciis, incluso pedicello, 140-160 × 20-25; appendice 30 × 20.

Hab. in insecto Lacmobothrio atro, ad Cost' New England. — Appendix latior *Pucciniam* fere aemulatur.

5. **Trenomyces gibbus** Thaxt., Proc. Amer. Acad. 1912, p. 386. — *Mas* 3864
ignotus.— *Femina: Tr. histophoro* similis; perithecio 300 μ long. incluso pede (20 μ longo) gibbo, apice supra geniculum 32 μ longo, basi 28-30 μ cr., apice 7 μ lat.; appendice 25 × 10.

Hab. in Lipeuri longipili (exempl. unicum), California.

ZEUGANDROMYCES Thaxt., Proc. Amer. Acad. 1912, p. 177. — Receptaculum ex cellulis binis constans, superior perithecium et antheridia gerens; appendices e cellula pedunc. et serie superpositarum cellularum, quarum ima basilari a ceteris discreta vel non, ex cuius latere interiore series binae antheridiorum conjugatorum oriuntur; perithecium vulgo solitarium, cellula pendunc. bene evoluta suffultum; trichogynum e basi partis liberae trichophori.

1. **Zeugandromyces australis** Thaxt., Proc. Amer. Acad. 1912, p. 178. 3865
Hab. in corpore Scopaei levis, Palermo Argent. — Perith. 155 × 40; cellula pedunc. 16 × 27; appendix incl. cellula ped. 44-54 μ; antheridia 20 μ; long. tot. ad apic. appendicis 90 μ, ad apicem perithecii 250 μ.

CORETHROMYCES Thaxt. — Syll. XI p. 449, XIV p. 729, XVI p. 681, XVII p. 917.

1. **Corethromyces appendiculatus** Thaxt., Proc. Amer. Acad. 1915, p. 41. 3866
Hab. in elytris insecti Anaspidis affinis speciei, Samarang Java. — Perith. 50-60 × 16, pes 8-10 × 5, pars libera appendicis terminalis 6 × 2, appendix primaria axis 28-45 × 7, rami hyalini 28 μ, long. tot. ad apicem perithecii 70-85 μ; receptaculum 10 × 5.

2. **Corethromyces ? andicola** Speg., Lab. Arg. p. 487, fig. 29. — Mediocris, totus hyalinus; cellula basali conoidea, subbasali subbulbiformi subcuboidea septo obliquo in segmentis duobus triangularibus oppositis divisa, cellulis duobus connatis collum breve angustius efformantibus coronata; cellula ventrali colli anguste lineari pedicellifera, dorsali subcuboidea appendicifera; perithecio sublanceolato non v. vix inaequilaterali, in pedicello elongato, deorsum sensim attenuato, producto; appendice androstichali elongata sursum leniter incrassata subfusoidea 12-15-mera, paraphysibus omnino destituta. 3867

Hab. in elytris Chiliotis formosae, Nahuel-Huapi, Neuquén, ex Museo Platens. Argent. — Perith. 55-62 × 19-22, pedic. 60-65 × 7-15; append. 175-200 × 10-15.

3. **Corethromyces Silphidarum** Thaxter, Proc. Amer. Ac. of Sc. 54., 1918, p. 217. — Undique et uniformiter sordide flavidum. Peritheciis 50-65 × 15; sporis circ. 20 × 2; appendicibus 50-60 μ cum cellula basilari circ. 10 × 7; receptaculo 18-20 × 16-18, cellula pedicellari perithecia inclusa; totus fungus 85-100 μ long. 3868

Hab. ad elytras Cholevae sp., Corral Chile, America austr. — Proxima *C. bidentato* et *C. curvato* sed differt forma et habitu erecto

perithecii, cellula subbasali et cellula pedicellari perithecii magis elongata.

4. **Corethromyces curvatus** Thaxter, Proc. Amer. Ac. of Sc. 54., 1918, p. 218. — Color uniformiter pallide flavum; aspectu brevi obtuso, hinc inde fortiter incurvatus. Peritheciis 50-60 × 20-22; sporis circ. 24 × 2,5; appendicibus e apice ramulorum 75-100 μ; ramulis longioribus 50-60 μ; cellula basilari et pedicellari 35 × 38; totus fungus e apice perithecii 75-95 μ long. 3869

Hab. in Cholevae sp., Aukland Nova Zelandia (Eames et Sinnott). — *C. Silphidarum* et *C. bidentato* magis affinis sed differt conformatione perithecii et appendicum etc.

5. **Corethromyces bidentatus** Thaxter, Proc. Amer. Ac. of Sc. 54., 1918, p. 219. — Uniformiter pallide flavum, varie incurvatum. Peritheciis 52 × 15; sporis circ. 20 × 2-5; appendicibus e apice ramulorum 55-65. Totus fungus 60-70 μ long. 3870

Hab. ad elytras Cholevae sp., Aukland Nova Zelandia (Eames et Sinnott). — *C. Silphidarum* affinis a qua mox dignoscitur emergentiis lateralibus duobus dentiformibus e apice productis.

6. **Corethromyces bicolor** Thaxter, Proc. Amer. Ac. of Sc. 54., 1918, p. 220. — Perithecio in regione ventrali olivaceo nigricanti, sed parte distali distincte et abrupte hyalina; receptaculo angustato elongato obconico, opaco bilobo. Perithecio 50 × 16, receptaculo ab apice lobi longioris, pede incluso, 70-85 μ; totus fungus 110-124 μ long., 20-24 μ latus. 3871

Hab. in pedibus et abdomine Cholevae sp., Aukland Nova Zelandia (Eames et Sinnott).

7. **Corethromyces argentinus** Thaxt., Proc. Amer. Acad. 1912, p. 181; Speg. Lab. Arg. fig. 30. 3872

Hab. in artubus et abdomine Cryptobii sp., Palermo Argent. et Cryptobii agilis, Santiago. — Perith. 160-290 × 40-55; pars ascigera 165-170 μ. cellula ped. 40-60 × 20-30; sporidia 40 × 3,5; axis primar. appendicum 50 μ; long. tot. ad apices append. longior. 370 μ; ramuli crassiores 8 μ; recept. 40 × 8.

8. **Corethromyces ? subsigmoideus** Speg., Lab. Arg. p. 505, fig. 44. — Parvus, pallide stramineus; cellula basali parva obconica subbasali majore rotundata ventre prominula; androsticho erecto brevi 4-5-mero, articulis cito decrescentibus saepius appendiculis brevissimis tenuibusque ornatis; perithecio lanceolato-naviculari, apice obtuso, dorso superne praecipue grosse parceque fusco-verrucoso, basi cellulis 2 segmentiformibus donato, abrupte in pedicello subae- 3873

quilongo arcuatulo producto.

Hab. in parte inf. abdominis Eurhexii Putzeyssi, La Plata, Arg. — Perith. 75-85 × 30 (sine ped.), ped. 60-65 × 15.

9. **Corethromyces formicetorum** Speg., Lab. Arg. p. 490, fig. 32. — Mediocris fere hyalinus rectus, cellula basali hyalina ungue minuto donata obconica, subbasali lenissime fumosa latitudine duplo breviore, androsticho fumoso catenula cellulari 4-5-mera paraphysifera ornato, gynosticho etiam fumoso brevi connato, perithecio hyalino elongato sublageniformi coronato. 3874

Hab. in thorace et coxis Heterotopis formicetorum, Santa Catalina B. A., Argent. — Alt. tot. 225-250 µ; perith. 145-155 × 40.

10. **Corethromyces rostratus** Thaxt., Proc. Amer. Acad. 1912, p. 191. 3875

Hab. in partibus variis, praecipue abdomine Heterothopis sp., Temperley et Llavallol Argent. — Perithecia, excl. cellula basil., 120-135 × 20-22, cell. basil. 8 × 6; receptac. 55-58 µ, sporidia 30 × 3; appendix 95-100 × 12-14, rami longiores 155 µ; long. tot. ad apicem perithecii 200-230.

11. **Corethromyces macropus** Thaxt., Proc. Amer. Acad. 1912, p. 190. 3876

Hab. in corpore insecti Heterothopis, Llavallol Argentina — Perithec. cum pede 55 × 8; appendix 50-55 × 8-10; long. tot. ad apicem perith. 150-180; sporidia 30 µ l.

12. **Corethromyces platensis** Thaxt., Proc. Amer. Acad. 1912, p. 183. 3877

Hab. in corpore Lathrobii nitidi, Palermo, Temperley, Llavallol Argent. — Perith. cum basi 118-125 × 34-40; pars sporif. 75-100 µ; cellula pedunc. 40-60 × 12-20; sporidia 24 × 2,5; longit. total. append. longior. 150-360 µ; recept. incl. pede 40 × 20; long. tot. ad apicem perithecii 85-235 µ — var. **gracilis** Thaxt., l. c., Speg. Lab. Arg. p. 491 fig. 33 (ut spec.), differens perithecio et cellula pedunc. longioribus et angustioribus. — *Hab.* in Stereocephalo seriatipenni et Lathrobio dimidiato et nitido, La Plata.

13. **Corethromyces Medonis** Thaxt., Proc. Amer. Acad. 1915, p. 38. 3878

Hab. in abdomine infer. Medonis curti, Samarang Java et Medonis Birmani, Borneo — Perithecium 78-100 × 20-28; pes 20-39 × 12-16; appendix primaria 27-31 × 9, ramuli longiores 50 µ; long. tot. ad apicem perithecii 125-175 µ.

14. **Corethromyces decipiens** Thaxt., Proc. Amer. Acad. 1915, p. 38. 3879

Hab. in abdomine Medonis birmani et Med. ochracei, Borneo et Med. curti, Samarang, Java. — Perith. 75-100

× 16; pes 12 × 8; receptac. cum pede 25-30 μ, processus calcariformis 35-40 μ, appendix incl. ramis 55-65 μ, long. tot. ad apicem perith. 120-150 μ.

15. **Corethromyces Ophitis** Thaxt., Proc. Amer. Acad., 1912, p. 182; Speg. Lab. Arg. fig. 34. 3880

Hab. in insecto Ophite Fauvelii, Palermo Argent. (J. Brethes), La Plata (Speg.). — Perithecia 175 × 28, inclusa basi 20 μ; appendices 70, ad apices ramorum 170 μ; receptac. cum pede 50 μ; long. tot. ad apicem perith. 275 μ.

16. **Corethromyces pulchellus** Speg., Lab. Arg. p. 495, fig. 37. — Submajusculus; cellula basali subhyalina, subbasali nigra opaca sursum per androstichum in calcare atro opaco producta; perithecio cylindraceo-elliptico utrinque leniter angustato, apice rotundato-ostiolato, deorsum in pedicello valde graciliore pluries breviore attenuato; appendice e cellula tertia supera subcultriformi androstichi exsurgente, articulis obconicis subfumosis alterne sympodicis, filamentis tenuibus hyalinis coronatis efformata. 3881

Hab. in toto corpore Pinophili Bergi, in ins. Santiago, La Plata Arg. — Alt. tot. 190-210 μ; perith. 125-130 × 30-32 (sine pedic.).

17. **Corethromyces rhinoceralis** Thaxt., Proc. Amer. Acad. 1912, p. 189, Speg. Lab. Arg. fig. 38. 3882

Hab. in superficie inf. abdominis Pinophili suffusi, Llavallol et Sta Catalina Argent. (Speg.). — Sporidia intra perith. 45 × 6; perithecium, inclusa basi, 240-250 × 46; spina subterminalis 86-90 × 8-10, cellula pedunc. 60 × 15; receptaculum cum pede 70 μ; appendicis pars libera 135 μ.

18. **Corethromyces valdivianus** Thaxter, Proc. Amer. Ac. of Sc. 54., 1918, p. 220. — Regione cellulae pedicellaris perithecii ventricoso-inflata, colore opaco ad apicem axis appendicum suffuso. Perithecio 120-140 × 20-22 cellula basali inclusa; sporis 45 × 3,5; receptaculo e apice axis appendicum 100-120 μ; in regione ventricoso-inflata 28-32 μ latus; totus fungus ad apicem perithecii 190-225 μ. 3883

Hab. in apice abdominis Quedii, Corral Chile America austr.

19. **Corethromyces Scopaei** Thaxt., Proc. Amer. Acad., 1912, p. 184. 3884

Hab. in abdomine super. Scopaei fratris, Palermo Argent. — Perith. 65-75 μ; pars ascigera 55-70; cellula ped. 28 × 12; receptacul. 20 × 16; longit. total. ad apicem perith. 95-120; sporidia 18 × 2.

20. **Corethromyces scydmaenicola** Speg., Lab. Arg. p. 497, fig. 41. 3885

Parvulus, totus hyalinus; receptaculo breviusculo crassiusculo, cellula basali obconica, subbasali trigona; androsticho, cellula globosa imposito, erecto simplice 5-6-mero, antheridia nonnulla breviter pedicellata ferente; perithecio late rhomboideo elliptico, deorsum breviter pedicellato, ostiolo minuto subbilabiato apice hiante.

Hab. in elytris Scydmaenidei cujusdam crassi, in nidis Attae Lundi viventis, La Plata Argent. — Alt. tot. 135-160; perith. 85-90 × 50 (sine pede).

21. **Corethromyces orientalis** Thaxt., Proc. Amer. Acad. 1915, p. 40. 3886

Hab. in abdomine et prothorace Stilici Ceylonensis, Buitenzorg (THOMPSON), Samarang, Java. — Perith. 66 × 16, pes 40-45 × 13; append. primaria 25 μ, ramis longiores 250-275 μ; recept. 28, pars libera processus 24 × 4; long. tot. ad apicem perithecii 135-145 μ.

22. **Corethromyces pallidus** Speg., Lab. Argent. p. 493, fig. 35. — Mediocris, pallidus, cellulis prima et secunda hyalinis, appendice 6-7 mera subsimplice sursum tenuiter ramulosa, achroa ejusdem cellula infima excepta infuscata et sequente ramulum antheridiferum proferente saepius fumoso, perithecio elongato elliptico pallide melleo laevi v. subtoruloso cellulis basilaribus eximie perspicuis, pedicello subcylindrico hyalino suffulto ostiolo obtuso coronato. 3887

Hab. in ore et artubus Stereocephali seriatipennis, La Plata Arg.—Alt. tot. 140-160; perith. 75-90 × 20-25 (sine ped.).

23. **Corethromyces Stilici** Thaxt., Syll. XVI p. 681. — **C. pygiphilus** Speg., Lab. Arg. p. 498 fig. 42 a. — Mediocris, receptaculo fere toto nigro calcare androstichi eximie evoluto subclavulato atque subarcuato plus minusve incurvato obscure melleo, pedicello obclavato hyalino breviore v. longiore fulto. 3888

Hab. frequens et abundans in abdomine Stilici elegantis, Monte Video et Sta Catalina, B. A., La Plata. — Alt. tot. 150-175; perith. 60-85 × 25-30 (sine ped.).

24. **Corethromyces rectus** Speg., l. c. p. 499 fig. 42 b. — Majusculus, totus melleus, erectus, rectus, perithecio elliptico-conoideo v. ovato exappendiculato, cellulis basilaribus indistinctis, cellula pedicellari praelonga recta crassa, receptaculo parvo parce nigrefacto, calcare nigro brevi v. brevissimo, appendice crassa breviuscula pallida v. subhyalina. 3889

Hab. in abdomine Stilici elegantis, Sta Catalina B. A. et La Plata, Arg. — Alt. tot. 250-275 μ; perith. 79-85 × 22-28 (sine ped.).

25. **Corethromyces verrucifer** Speg., l. c. p. 502, fig. 42 f. — C. longi- 3890
cauli Thaxt. paraffinis, ostiolo perithecii e latere ventrali verruca difformi sat prominula distincto, calcare cellulae basalis rudimentario.

Hab. in thorace Stilici elegantis, Sta Catalina B. A., Argent. — Alt. tot. 150-200; perith. 55-65 × 20-22 (sine ped.).

26. **Corethromyces stilicicola** Thaxt. — Syll. XVII p. 917 (*Stichomyces*) – 3891
* **C. podophilus** Speg., l. c. p. 504, fig. 43-b. — C. stilicicolae Thaxt. persimilis sed totus plus minusve melleus; receptaculo androsticho gynostichoque summopere ludentibus non divaricatis, perithecio sublanceolato exappendiculato, cellula basali receptaculi calcare plane destituto.

Hab. in femore Stilici elegantis, Sta Catalina et La Plata, Arg. — Alt. tot. 135-150; perith. 75-80 × 25 (sine ped.).

27. * **C. sternalis** Speg., l. c. p. 504, fig. 43 c. — Praecedentibus valde 3892
affinis ob receptaculum non nigrifactum nec calcaratum sed ab utroque eximie distinctus pedicello peritheciali incrassato obclavatoque nec non cellula apicali appendicis longe tenuiterque comosa.

Hab. in artubus Stilici elegantis, Sta Catalina B. A., Argent. — Alt. tot. 100-125 μ, perith. 55-75 × 18-25 (sine ped.).

28. **Corethromyces sigmoideus** Thaxt., Proc. Amer. Acad. 1912, p. 187. 3893

Hab. in margine super. dextero prothoracis Stilici elegantis, Llavallol, Argent. — Perith. 70-85 × 23-27; cellula pedunc. 60 × 18; recept. incluso pede 40 μ l.; longit. total. ad apicem perithecii 135-170; sporidia 26 × 3.

29. **Corethromyces unciger** Thaxt., Proc. Amer. Acad. 1912, p. 188, 3894
Speg. Lab. Arg. fig. 42 g.

Hab. in artubus posterioribus Stilici elegantis, Llavallol, et La Plata Argent. — Sporidia 26 × 2,8; perith. 70-85 × 20-26; cellula pedunc. 50-125 × 15; appendices longiores 75 μ; recept. incl. pede 30-40, ejus processus 30-60 μ; tot. longitudo ad apicem perithecii 150-250 μ.

30. **Corethromyces pygmaeus** Thaxt., Proc. Amer. Acad. 1912, p. 186, 3895
Speg. Lab. Arg. fig. 42 d.

Hab. in capite et labio Stilici sp., Palermo et La Plata Argent. — Perith. 70-85 × 23-27; cellula pedunc. 60-18; receptac. cum pede 40 μ; longit. tot. ad apicem perithecii 135-170 μ; sporidia 26 × 3.

31. **Corethromyces brunneolus** Thaxt., Proc. Am. Acad. 1912 p. 185. 3896

Hab. in elytra Stilici sp., Temperley Argent. — Sporidia 22

× 2,5; perith. 58-62 × 20, pars ascigera 54-58 μ; cellula pedunc. 23-30 × 12; receptac. 24 × 16 cum pede; appendix incl. ramis 100, cellula basilaris 20 × 16.

32. **Corethromyces armatus** Thaxt., Proc. Amer. Acad. 1912, p. 188. 3897
Hab. in superficie super. prothoracis Stilici sp., Palermo et Temperley, Tucuman Argent. — Sporidia 32 × 3; perith. 60-70 × 20-23, ejus processus terminalis margine sup. 28 μ., infer. 40 μ cellula pedunc. 30-45 × 12-18; receptac. 30 × 10; appendix longior 175; tot. longitudo ad apicem perithecii 120-150 μ.

33. **Corethromyces thinocarinus** Thaxt., Proc. Amer. Acad. 1915, p. 39. 3898
Hab. in superf. inf. abdominis Thinocaris pygmaeae, Samarang Java. — Perith. 55-72 × 12-13; appendix cum ramis 35-50; recept. 9 × 7; processus spiniformis 18-55 × 3; long. tot. ad apicem perithecii 75-95 μ.

34. **Corethromyces Xantholini** Speg., Laboulb. Argent. in Anal. Mus. 3899
Nac. Buenos Aires XXIII p. 183 (1912) c. ic. — Totus fuscus 250-300 μ altus; paraphysibus saepius ternis, torulosis, extrorsum appendiculatis, plus minusve nigrescentibus; peritheciis pallidis vel fumosis, ex elliptico subcylindraceis, 120 × 30, longe pedicellatis.
Hab. in Xantholino subtile, La Plata, Argentina. — Affinis *C. Crytobii* Thaxt. et *C. jacobini* Thaxt., a quibus facile distinguitur ob perithecium pedicellatum et paraphyses atratas.

STICHOMYCES Thaxt. — Syll. XVI p. 692, XVII p. 917.

1. **Stichomyces Catalinae** Thaxt., Proc. Amer. Acad. 1912, p. 192. 3900
Hab. in corpore Conosomatis testacei, Llavallol, Argent. — Perith. 50-60 × 15-20; recept. incluso pede 30-55 × 9-12; appendicis axis 30-35 × 12; long. tot. ad apicem ramulorum longiorum 75 μ; long. tot. ad apicem perith. 90-125 μ.

2. **Stichomyces Cybocephali** Thaxt., Proc. Amer. Acad. 1915, p. 42. 3901
Hab. in elytris Cybocephali sp., Peradeniya Ceylon. — Perithec. 30-35 × 7-8; sporidia 25 × 2; axis 20-27 × 7; ramuli 15-18; pes 12 × 5,5.

3. **Stichomyces Pterogenii** Thaxt., Proc. Amer. Acad. 1915, p. 42. 3902
Hab. in elytris Pterogenii Nictneri, Peradeniya, Ceylon. — Perith. 40-50 × 9-10; sporidia 18-20 × 2, intra perith.; axis primarius 30-35 × 10-12; ramuli longiores 175 μ.

RHIZOMYCES Thaxt. — Syll. XIV p. 730, XVI p. 680.

1. **Rhizomyces circinalis** Thaxter, Proc. Amer. Ac. of Sc., 53., 1918, 3903

p. 709. — Cellula basali infra constricta et in matrice apparatum rhizoideum efformanti, subbasali parum longiori quam latiori, flavo-brunnescentibus; axe appendicum usque triginta cellulis efformato, interne curvatis, apicem versus circinnatis v. helicoideis, cellula basali obscure rubro-brunnea caeteris pallide flavescentibus et brunneo tinctis; perithecio spinuloso 150 × 58, cellula pedicellari 508 × 28; sporis parvis et numerosis 15 × 2; receptaculo 35 × 28, appendicibus circ. 275-350 μ long. axe 12 μ cr. ramis latioribus circ. 50 μ; totus fungus 690 μ long.

Hab. in abdomine Diopsidis sp. (Dipt.), Gambia River, Africa occ. (Wolbach). — *Rh. ctenophoro* proxima species sed caracteribus appendicum et perithecii praedistincta.

2. **Rhizomyces confusus** Thaxter. Proc. Amer. Ac. of Sc. 53., 1918, 3904
p. 710. — Syn. *Rhiz. crispatus* Thaxter p. p., Mem. Amer. Ac. Arts and Sc. vol. XIII n. 6, p. 323, tab. LII fig. 19, 21. — Cellula subbasali receptaculi processu dentiformi obtuso ultra cellulam pedunculatem perithecii protrundenti; axe perithecii cum receptaculo angulum notabile efformanti; appendicibus longis divergentibus, ramulis brevibus numerosis; perithecio uniformiter flavido-brunneo, extus incurvato, apice obtuso, lato, caeterum normali.

Hab. in Diopside sp. [Dipt.], Kamerun, Port Natal Africae trop. — A *Rh. crispati* caracteribus appendicum, perithecii, receptaculi etc. diversa.

3. **Rhizomyces cornutus** Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, 3905
p. 711. — Receptaculo flavido; cellula basali subhemisphaerica in matrice processu rhizoideo efformanti; appendicibus erectis v. leniter divergentibus, axe ex duodecim cellulis constante, basali parva subopaca caeteris flavescentibus et brunneo tinctis, apice quatuor v. quinque ramulis curvis simplicibus brevibus obtusis, flavido-brunneis praeditis; cellula pedicellari elongata, valida subuniformi; regione basilari perithecii nitide succineo-brunnea et cum perithecio concolori extus leniter curvula, 135-140 × 35-40, cellula pedicellari 280-350 × 22. appendicibus 185-195. axe ramorum 18 μ, ramulis 18 μ; totus fungus 400-525 μ long.

Hab. in inferiori parte abdominis Diopsidi sp. (Dipt.), Kamerun, Africa occ.— Proxima *R. circinalis* et *gibbosi* sed caracteribus appendicum et perithecii diversa.

4. **Rhizomyces gracilis** Thaxter, Proc. Amer. Ac. of Sc., 53., 1918, 3906
p. 712. — Erectus longus et gracilis; pede normali; cellula basali receptaculi magis lata quam longa; oblique prominenti, subbasali

longiore quam latiore axe divergenti utrinque leniter constricto; appendicibus ex 17 cellulis efformatis hyalinis erectis apicem perithecii vix excedentibus, cellula basilari parva et subtriangulari, ramis ex 5-6 ramulis hyalinis efformatis; cellula pedicellari perithecii brevi, hyalina erecta; perithecio concolori 60 × 22 cum regione basali 88 μ long.; cellula pedicellari 284 × 15; receptaculo circ. 25 × 14; appendicibus 350 μ long., ramulis lateralibus circ. 50 μ; totus fungus 355 μ long.

Hab. in Diopsidis sp. [Dipt.], Killimandjaro Africa or. — *Rh. confuso* proximus sed differt caracteribus appendicum.

5. **Rhizomyces kamerunus** Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, 3907
p. 713. — Cellulis receptaculi subaequalibus vix longioribus quam crassioribus, subbasali obscuriori; appendicibus suberectis v. plerumque circa perithecium incurvatis, axe ex 10-20 cellulis efformato, infra obscurioribus subopacis; ramulis nonnullis clavatis, nigricantibus, apice subhyalinis, ramulis 2-5 curvulis apicem versus extusque sitis gerentibus, nigricantibus apice incrassatis subhyalinis; cellula pedicellari perithecii basi plerumque incurvata et tunc perithecio parum divergenti; peritheciis 75-80 × 25, cellula pedicellari 35-50 × 11, sporis circ. 22 × 2,5, appendicibus 175 μ, ramis 70-100, receptaculo circ. 22 × 8, totus fungus 140-160 μ.

Hab. ad crura antheriora Diopsidis sp. [Dipt.], Kamerun Africa occ. — *Rh. confuso* proxima sed caracteribus ramulorum, perithecii etc. diversa.

SPHALEROMYCES Thaxt. — Syll. XI p. 453, XIV p. 736, XVI p. 692.

1. **Sphaleromyces Bruchi** Speg., Laboulb. Argent. in Anal. Mus. Nac. 3908
Buenos Aires XXIII p. 195 (1912), fig. 23. — Parvulus, 190-200 μ altus, fuscus, calcare nigro 50-60 × 15-13 armatus; appendicibus sterilibus axillaribus paucis brevibus fumosis; perithecio subfusoideo, 100-120 × 25-28, fusco-fumoso, longitrorsum valvatim dehiscente, ostiolo minute bidentato.

Hab. in Lema D'Orbignyi et L. Dejani, minas Geraes, Brasilia.

2. **Sphaleromyces andinus** Speg., Lab. Arg. p. 670, fig. 202. — Mediocris, 3909
receptaculo elongato-obconoideo nigerrimo opaco, perithecio melleo sub ostiolo nigricante e cylindraceo subfusoideo, apice abrupte subtruncato-bilabiato, labiis rotundatis inter labia minute appendiculata.

Hab. in abdomine Philonthi impressifrontis, Na-

huel-Huapi, And.: Argent.—Perith. sine pede 75-85 × 23-25; alt. tot. 175-200 µ.

3. **Sphaleromyces speluncalis** Maire, Bull. Soc. Hist. Nat. Afrique du Nord, t. VII, 1916, p. 18, tab. II, fig. 23-29. — Minor, 140-155 µ long. tot., dilute rufo-brunneus, pellucidus tenuiter tunicatus, stigmatiferus. Receptaculo 40-50 µ longo, bicellulari; cellulae basales obconicae, 30-40 × 15-21, pede atro et parte inferiore supra pedem macula subatra notata; cellulae subbasalis pentagonae septo inferiore transversali. Appendice masculo pede unicellulari nec non 4-6 cellularum oblique septatarum serie formato, serici cellulis ramos hyalinos, septatos, tenuissime tunicatos (antheridiferos?) mox collabescentes gerentibus. Perithecii pede a cellulis basalibus vix distincto. Perithecio ellipsoideo-oblongo 80-85 × 26-28, pellucido, apice cornubus brevibus, 2 hyalinis et tertio atrato, praedito. Ascosporis ad $^1/_4$-$^1/_5$ inferiorem uniseptatis, aciculari-subfusiformibus, hyalinis, laevibus, 32-36 × 2-2,5, strato mucoso obvolutis. 3910

Hab. in abdomine Heterothopis nigrae, Tlemcen Algeria Africae bor. (P. DE PEYERIMHOFF).

CERAIOMYCES Thaxt. — Syll. XVI p. 682, XVII p. 918.

1. **Ceraiomyces minusculus** Thaxt., Laboulb. on Chrysom. 1914, p. 47. 3911

Hab. in antennis Chaetocnemae nanae, Balaclava, Jamaica. — Perith. 70 × 26; cellulae I-II 18 × 21, cell. III 30-32 × 4; appendix inclusis antheridiis 22; long. total. ad apicem perithecii 90-95 µ.

2. **Ceraiomyces dislocatus** Thaxt., Laboulb. on Chrysom., 1914, p. 47. 3912

Hab. in superf. inf. abdominis Chaetocnemae minutae, Trinidad. — Perith. 80-90 × 35; cellula I 50-85 × 15; cellula II 17 × 18, cellula III 24-28 × 7; appendix ad apicem antheridii 25 µ; longit. tot. ad apicem perithecii 125-175.

3. **Ceraiomyces Chaetocnemae** Thaxt., Laboulb. on Chrysom., 1914, pag. 49. 3913

Hab. in elytris Chaetocnemae sp., Amazonia, Chaetocn. minutae et Epitrichis lucidae et E. convexae, Port of Spain, Trinidad. — Perith. 60-116 × 38-42; sporidia 52 × 4; cell. I-II 60-122 × 22-25; cell. III 38-42 × 8-10; appendix 30 µ; long. tot. ad apicem perithecii 160-250 µ.

4. **Ceraiomyces Epitrichis** Thaxt., Laboulb. on Crysomel. 1914, p. 45. 3914

Hab. in elytris Epitrichis convexae, Port of Spain, Trinidad.—Perith. 50-70 × 16; appendix, inclusis antheridiis, 30-32 µ;

cellula III 28 × 7 ; long. totalis ad apicem perithecii 140-160 μ.

5. **Ceraiomyces obesus** Thaxt., Laboulb. on Chrysom., 1914, p. 46. 39
Hab. prope basim artuum anter. Epitrichis convexae, Port of Spain, Trinidad. — Perith. 106-112 × 52-60 ; append. incl. antheridiis 18 μ; receptac. cellulae I-II 52 × 18, cell. III 36 × 10, long. tot. ad apicem perithecii 140-160 μ.

6. **Ceraiomyces trinidadensis** Thaxt., Laboulb. on Crysom., 1914, p. 48. 39
Hab. in artubus Epitrichis convexae, Port of Spain, Trinidad. — Perith. 80-88 × 28 ; cellula I 28-35 × 18; cellula II 18 μ, cell. III 28 × 10 ; appendix, inclusis antheridiis, 35 ; long. tot. ad apicem perithecii 125 μ.

7. **Ceraiomyces Nisotrae** Thaxt., Laboulb. on Chrysom., 1914, p. 49. 39
Hab. in elytris, imprimis sinistr. Nisotrae sp., Kamerun et Madagascar, Afr. — Perith. 100-125 × 35-40 ; sporidia 40 × 4 ; cellulae I-II 50 × 22-24, cell. III 24-28 × 8-10 ; longit. total. ad apicem perith. 175-200 μ.

ECTEINOMYCES Thaxt. — Syll. XVII p. 918.

1. **Ecteinomyces Agathidii** R. Maire, Bull. Soc. Hist. Nat. Afrique du 39
Nord, t. 11, 1920, Extr. p. 31, tab. II fig. 18-19. — Hyalinus v. dilutissime stramineus; receptaculo multicellulari, e cellulis (plerumque 6-8) applanatis, monostichis, contexto, perithecium v. rarius 2 perithecia, nec non 1-2 appendices secundarias infra perithecia gerenti, apice in appendicem primariam abeunti. Appendice primaria receptaculo simillina, plerumque 4-cellulari, ramos breves et saepe ramulos filiformes elongatos gerenti. Appendicibus secundariis brevibus, 2-4-cellularibus, rarius parce ramosis. Perithecio juniori ellipsoideo-elongato, apice regulari, obtuso. Antheridiis non visis. — Totus fungus 70-102 μ alt.
Hab. in Agathidio laevigato Er., in Mauretania Tingitana, Africa bor.

2. **Ecteinomyces devexirostris** Speg., Laboulb. Arg. p. 536, fig. 79. — 39
Majusculus, hyalinus ; receptaculo lineari recto v. flexuoso 32-36-mero, deorsum vix attenuato, sursum recte in androsticho lineari brevi 6-8-mero mox deciduo producto, cellulis fere omnibus longitudine parum latioribus; antheridia non visa; appendicibus paucis filiformibus breviusculis; perithecio sub-ellipsoideo superne abrupte in ostiolo cylindrico saepius longiore apice obtuso minute bilabiato; in juventute erecto ad maturitatem devexo, producto.
Hab. in elytris et abdomine Copropori argentini,

La Plata, frequens. — Alt. tot. 500-600 μ; perith. sine ostiolo 80-115 × 30-35.

3. **Ecteinomyces argentinensis** Speg., Laboulb. Arg. p. 533, fig. 77.— 3920
Majusculus, hyalinus; receptaculo lineari recto v. flexuoso 15-22-mero, deorsum leniter attenuato sursum recte in androsticho lineari 12-20 mero producto, cellulis omnibus longitudine duplo triplove latioribus; antheridia pauca articulis supremis androstichi lateraliter insidentibus, appendicibus fere nullis; perithecio ovato superne abrupte in ostiolo conico recto breviore apice obtuso attenuato.

Hab. in thorace et abdomine Copropori argentini, frequens. La Plata. — Perith. 160-175 × 55-60, alt. tot. 350-400 μ.

4. **Ecteinomyces platensis** Speg., Lab. Arg. p. 543, fig. 84. — Majus- 3921
culus, subhyalinus; receptaculo late lineari recto 25-32 mero, deorsum valide acuteque attenuato, ungue nigro calcare concolore adscendente nullo v. plus minusve evoluto armato, sursum oblique in androsticho crasso brevi 7-9-mero, appendicibus ventralibus brevibus tenuibus densis barbato, producto, cellulis omnibus linearibus polyblastis v. septis verticalibus 1-3 irregulariter muralibus; antheridia non visa; perithecio receptaculo recte imposito elongato-sublanceolato sursum attenuato abrupte (e latere ventrali denticulo obtuso limitato) in ostiolo cylindrico breviore saepius rect. v. ad maturitatem patulo v. devexo apice subcapitato-acutato producto.

Hab. in toto corp. Copropori platensis, S. Catalina B. A., Arg. — Perith. sine ost. 80-140 × 30-38; alt. tot. 275-425 μ.

5. **Ecteinomyces filarius** Thaxt., Proc. Amer. Acad., 1912, p. 212. 3922

Hab. in elytra Copropori rutili, Tucuman, Argent. (Spegazzini). — Sporidia 30-35 × 3; perithec. 70 × 14, cellula pedis 18 × 8; receptac. 230-275 × 7-9; long. total. 290-340 μ.

6. **Ecteinomyces Copropori** Thaxt., Proc. Amer. Acad., 1912, p. 213. 3923

Hab. in abdomine Copropori rutili, Tucuman, (Spegazzini) et Guatemala (Kellerman).—Perith. 140-200 × 38-48; cellula pedis et ima basilaris 20 μ; appendix 60-100; long. tot. ad apicem perithecii 325 μ.

7. **Ecteinomyces major** Speg., Laboulb. Arg. p. 541, fig. 82. — Major, 3924
hyalinus, modice arcuatus, receptaculo basi flabellato-contracto multicellulari cum androsticho continuo, filamentis antheridialibus simplicibus tenuibus patentiusculis, perithecio patulo incurvato cylindraceo abrupte in ostiolo parum angustiore sed conspicue longiore producto.

Hab. in thorace Phaenonoti Spegazzini, ad truncos salicinos in ins. Santiago, La Plata. — Perith. sine ost. 150-175 ⨯ 48-50; ostiol. 250 ⨯ 20-30; alt. tot. 700-800 μ.

8. **Ecteinomyces lumbricoideis** Speg., Lab. Arg. p. 539, fig. 81. — Dioicus?, majusculus, hyalinus apicem versus fuscescens; receptaculis cylindricis 45-50-meris, recte in gonatophoro esomorpho 20-25-mero utrimque indefinito productis, cellulis latitudine duplo triplove latioribus superis saepius tamen subcuboideis supremisque subimbricatis atque fuscescentibus, nonnullis antheridiis conoideis curvulis sessilibus praeditis nonnullis peritheciis 1 v. plurimis nec non appendicibus filiformibus donatis; peritheciis elliptico-ovatis in ostiolo elongato attenuato incurvulo productis. 39

Hab. in abdomine Phaenonoti Spegazzini ad truncos salicinos in ins. Santiago, La Plata. — Alt. tot. 350-500; perith. sine ostiolo 50-55 ⨯ 32-36.

9. **Ecteinomyces intermedius** Speg., Laboulb. Arg. p. 538, fig. 80. — Mediocris, hyalinus; receptaculo lineari 8-15-mero cum gonatophoro 15-20-mero, articulis fere omnibus longitudine latioribus, continuo, perithecio subsessili oblique adscendente v. deflexo elongato superne abruptiuscule in ostiolo cylindraceo conspicue breviore subobtusiusculo producto; antheridiis parvis conoideis sessilibus solitariis v. geminatis e cellula basali filamentorum androstichi exsurgentibus. 39

Hab. in coxis et tibiis Phaenonoti Spegazzini, ad truncos salicinos in ins. Santiago, La Plata — Perith. cum ostiolo 125-150 ⨯ 25-30.

10. **Ecteinomyces rhytidopus** Speg., Laboulb. Arg. p. 546, fig. 86. — Mediocris, hyalinus; receptaculo pentamero, cellula basali maxima elongata trasverse dense minuteque ruguloso-papillosa, ceteris subcuboideis laevibus, exappendiculato; antheridiis ad angulum superum cellularum androstichi sparsis; sessilibus minutis conoideis; perithecio erecto, pedicello subturbinato brevi fulto, subcylindraceo apice subacutato. 39

Hab. in elytris Phaenonoti Spegazzinii, ad truncos salicinos in ins. Santiago, La Plata. — Perith. sine ped. 75-85 ⨯ 18-20; recept. 80-90 ⨯ 8-18.

11. **Ecteinomyces perpusillus** Speg., Laboulb. Arg. p. 543, fig. 83. — Perpusillus hyalinus saepius geniculatus, perithecio subhorizontali cellulae gynostichi majusculae ad medium usque adnato, elliptico, eximie longiusculeque rostrata ostiolato, androstichi cellula infera 39

etiam majuscula dorso perithecii adfixa 1-antheridiifera, appendice simplici gracili breviuscula donato.

Hab. frequens ad antennas Rhopalophori Gestroi in nidis Attae Lundi, Sta Catalina B. A., Florecio Varela et La Plata. — Perith. 45-48 × 17-18 ; alt. tot. 60-65 μ.

12. **Ecteinomyces ? bonariensis** Speg., Laboulb. Arg. p. 535, fig. 78.— 3929
Parvus, hyalinus ; receptaculo turbinato brevi recte in appendice multicellulari producto, cellula subbasali perithecia saepius bina v. terna anguste lanceolata breviterque pedicellata praedita, cellulis inferis appendicis antheridia pauca sessilia ad angulum ventralem superum gerentia, appendice primo contracta sursum sensim leniterque attenuata 20-25 mera, articulis initio brevissimis longitudine conspicue latioribus serius elongata superne subfusoidea, articulis latitudine longioribus, paraphysibus omnino nullis.

Hab. infrequens in elytris Staphylini sp. parvulae, La Plata. — Perith. sine ped. 55-65 × 14-16 ; alt. tot. 180-225.

13. **Ecteinomyces thinocharinus** Thaxt., Proc. Am. Ac., 1912, p. 213 ; 3930
Speg., Lab. Arg. fig. 87.

Hab. in abdomine Thinocharis exilis, Temperley, Palermo et La Plata Argent. — Sporidia 20 × 2,5 ; perith. 120-130 × 23-27 ; receptaculum 55-65 μ ; appendix pedis 18 μ ; appendix 35-50 μ, ramuli 75-90 μ.

14. **Ecteinomyces pusillimus** Speg., Laboulb. Arg. p. 545, fig. 85. — Per- 3931
pusillus, hyalinus ; receptaculo lineari 3-4-mero recto in perithecio submajusculo sessili elliptico-ovato producto, androsticho filiformi 4-6 mero patentiusculo donato.

Hab. in elytris Trichopteridini sp. perexiguae, in nidis Attae, Sta Catalina B. A. et La Plata. — Perith. 35 × 12-13 ; recept. 30 × 5-7

15. **Ecteinomyces zuphiicola** Speg., Laboulb. Mus. ital., in Anal. Mus. 3932
Nac. Buenos Aires XXVI (1915) p. 454, fig. 2. — Subhyalinus, 150-175 μ altus ; receptaculo lineari, subtoruloso, 8-10-cellulari, 75 × 10, in appendice plus minusve 15-cellulari, concolore vel obscuriore, parum angustiore, 70-80 × 6-8, non vel vix subfusoidea producto ; perithecio pleurogeno, cellula apicali receptaculi inserto, subcylindraceo, 80 × 30, basi nodulo brevi, crasso, bicellulari fulto, subhyalino, lineis transversis 8-10 tenuissimis fumosis notato, deorsum abrupte cuneato-rotundato, apice conice umbonato, ostiolo minuto exappendiculato.

Hab. in Zuphio piceo, Palòn, Pegù.

MISGOMYCES Thaxt. — Syll. XVI p. 693.

1. **Misgomyces Clivinae** Thaxt., Proc. Amer. Acad., 1915, p. 49. 3933
Hab. in margine elytrae Clivinae sp., Java (Ronyer). — Perith. 112 × 42; long. tot. ad apicem perithecii 580; latitudo maxima receptaculi 32 µ; appendix primaria 70 × 12.

2. **Misgomyces Heteroceri** R. Maire, Bull. Soc. Hist. Nat. Afrique du Nord, t. 11., 1920, Extr. p. 33, tab. II fig. 20-25. — Dilutissime ambrinus, perithecio rufo-brunneo. Receptaculo 2 5-cellulari; cellulis monostichis verrucosis; cellula basali elongata-uncinata, cellulis mediis subelongatis, cellula superiore perithecium, apicalem et appendicem masculam divergentem gerenti. Appendice mascula basi inflata verrucosa, tricellulari, rarius 4-cellulari, persistenti, apice ramosa mox collabescenti, ad basim ramorum 1-3 antheridia simplicia gerenti. Perithecio lageniformi, basi verrucoso, sursum laevi, cum appendicis masculae parte inferiore concrescenti, symmetrico, in rostrum subhyalinum attenuato, ostioli obtusi, labiis 3 papilliformibus; perithecii pedicello unicellulari brevissimo, cellulis basalibus 3 parvulis. — Totus fungus 163-320 µ alt. 3934
Hab. in Heterocero maritimo Guer., prope Hipponem Reg. Numidiae, Africa bor.

3. **Misgomyces Lispini** Thaxt., Proc. Amer. Acad., 1915, p. 48. 3935
Hab. in variis partibus Lispini impressicollis, Samarang Java, Peradeniya Ceylon, et Borneo. — Perith. 58-62 × 26-32; long. tot. ad apicem appendicis primariae 78-105 × 27-43; appendix ramosa 50-75; long. tot. ad apicem perithecii 110-140 µ.

4. **Misgomyces ornatus** Thaxt., Proc. Amer. Acad., 1915, p. 47. 3936
Hab. in margine elytrae dexterae insecti Tachyi affinis, Peradeniya Ceylon, Samarang Java. — Perith. inclusa basi 80-90 × 23-30, ejus appendix terminalis 25-75 × 4,5; cellula pedunc. 14 × 11; sporidia 35-40 × 2,5; long. tot. ad apicem appendicis primariae 65 × 25, ramuli 35-45; antheridia 30 × 2.

EUMISGOMYCES Speg., Contrib. estudio de las Laboulb. Argent. in An. Mus. Nac. Buenos Aires XXIII (1912) p. 176. — Individua hemaphrodita; receptaculum simplici cellulae superpositae omnes longe biseriatae; appendices, seu rami antheridiales, plerumque ramulis sterilibus praeditae; antheridia simplicia.

1. **Eumisgomyces Dohrni** Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. Buenos Aires, XXVI (1915) p. 456, fig. — Subparvus, 150-225 µ altus; cellulis pedicellaribus 5, sursum sensim majoribus, ad septa 3937

constrictulis, vix fumosis ; androsticho et gynosticho 3-cellularibus, apice ad maturitatem breviter separatis ; psallio nigro ; paraphysibus pluribus, densis, brevibus ; perithecio e cylindraceo subellipsoideo, 60-85 × 30-40, atro, laevi, apice crasso obtuseque umbonato, ostiolo hyalino.

Hab. in Euplymatia Dobrni in ins. Sumatra — *Laboulbeniae partitae* Thaxt. valde affinis nisi etiam identicus.

HYDROPHILOMYCES Thaxt. — Syll. XXII p. 16.

1. **Hydrophilomyces elegans** Speg., Laboulb. ital. II, in Anal. Mus. Nac. Buenos Aires XXVII (1915) p. 54, fig. 19. — Majusculus, 450 μ altus, receptaculo seu stipite 9-mero, cellula basali subhemisphaerica, secunda tertia et quarta alterne hypertrophicis, subclavatis, 75-100 × 30, caeteris normalibus, subcylindraceis, omnibus achrois ; perithecio in gynosticho monomero sessili, elliptico-elongato, 200 × 60, sursum attenuato atque sub apice vix incrassatulo abrupteque incurvato, per aetatem vix melleo ; androsticho etiam monomero, gynosticho adnato, in appendice divaricatissima, subrecta 20-22-mera, nuda, hyalina, 300 × 20-25 producto ; antheridiis non visis. 3938

Hab. in Laccobio scutellari, « Lago di Tarzo » Venet. Ital. bor.

2. **Hydrophilomyces coneglanensis** Speg., Laboulb. ital. II, in Anal. Mus. Nac. Buenos Aires XXVII (1915) p. 53, fig. 18. — Mediocris, 250 μ altus, receptaculo seu stipite 8-mero, cellula basali subhemisphaerica, secunda tertia et quarta alterne hypertrophicis, appendices digitiformes 75-100 × 20 μ efformantibus, caeteris normalibus, cylindraceis, omnibus achrois ; perithecio in gynosticho monomero sessili, late elliptico, 150 × 50, superne longe recteque attenuato-ostiolato, per aetatem melleo ; androsticho etiam monomero, gynosticho adnato, in appendice adpressa, 15-16-cellulari, hyalina, 150 × 18-19 producto, latere ventrali ramulis paucis simplicibus rectis setuliformibus ornato. 3939

Hab. in Laccobio sinuato, prope Coneglanum, Venet., Ital. bor. — Affinis *H. digitati* Pic. a quo differt receptaculo latiore, appendice breviore et praecipue antheridiis simplicibus non dichotomis.

3. **Hydrophilomyces digitatus** Picard, Bull. Soc. Mycol. Fr. XXV (1909) p. 245, c. ic., et XXIX (1913) p. 556. — Totus hyalinus. Receptaculo lineari, e 9-15 cellulis seriatim dispositis constituto ; cellula basali unica ; cellulis 4 sequentibus longitudinaliter 1-septatis, lo- 3940

culis 4 alternis in filamentum appendiculare cylindraceum, digitiforme, divaricatum productis; filamentis longitudinem totius individui fere attingentibus, inferiore longiore, caeteris sensim decrescentibus; cellulis superioribus 4-9, quadrangularibus, perithecio subsessile, elongato, basi ventricoso, superne in collum cylindraceo-conicum sat angustum et partem ascigeram duplo superans producto; maturitate sporidiis curvulis repleto; appendice primaria e cellulis 8-10 uniseriatis constituta, longitudinem receptaculi subaequante, cellulis omnibus appendicularibus in filamentum exiguum dichotomice ramosum productis. (Mensurae desunt).

Hab. sub elithris, rarius ad abdominem, Ochtebii marini, Trappes (Seine-et-Oise), Gallia.

Obs. Ob appendices basilares digitiformes perdistincta species; ut typus novi generis potius habenda.

HELODIOMYCES Picard, Bull. Soc. Mycol. Fr. 1913, p. 557 (Etym. *Helodes*, paluster). — Receptaculum e cellulis superpositis uniseriatis constitutum apice perithecium et appendices ferens; perithecium globosum apice acuminatum ostiolo lamellis quatuor mobilibus circumdato; asci numerosi ut videtur tetraspori; sporidia bicellularia cellula distali majori quam basali; parietibus perithecii e 4-v. 5 seriebus cellularum constitutis; appendices septatae et dichotomae, e duplice loco orientes: in apice receptaculi, basi perithecii et ex ejusdem perithecii parietibus circa medium sitae.

1. **Helodiomyces elegans** Picard, l. c. p. 558, tab. XXX fig. 11-12. — 3941
Receptaculo incurvato subsigmoideo, 460-475 μ longo e 25-30 cellulis superpositis efformato, e basi ad apicem sensim latioribus, apice sub perithecii insertione subcupulato, perithecio subgloboso 190 × 150, apice in ostiolum elongatum abrupte angustato; appendicibus 4-5, infra dichotomice ramosis, septatis, hyalinis 200-225 μ circ. long.; sporidiis fusoideis bilocularibus 40 μ long. — Colore flavo-aurato pallido. Totus fungus 650-665 μ longo.

Hab. infra et ad latere Parni prolifericornis, Verdanson Montpellier Herault et Parni hygrobates, Gramont prope Montpellier, Gallia.

AUTOICOMYCES Thaxt. — Syll. XXII p. 16.

1. **Autoicomyces anaceros** Speg., Laboulb. ital. II, in Anal. Mus. Nac. 3942
Buenos Aires XXVII (1915) p. 38 fig. 2. — Parvus, primo totus hyalinus dein leniter fumosus, geminatus, alter filiformis, abortivus

vel masculus ?, 100 × 5, alter evolutus, normalis, 200-250 μ altus; receptaculo 3-cellulari; androsticho 2-cellulari, in appendice crassa, obtusa, 8-10-mera, 120-125 × 20-25, cellulis 2 supremis breviter parcissimeque antheridifero-ramulosis producto; gynosticho 1-cellulari; perithecio conoideo-subcylindraceo, recto, 120-145 × 35-50, sursum attenuato, mutico, apice rotundato, labiis aequicrassis obtusis ornato.

Hab. in Laccobio sinuato, prope Roman et in « Lago di Tarzo », prov. Venet., Italia.

2. **Autoicomyces crassus** Speg., Laboulb. ital. II, in Anal. Mus. Nac. 3943
Buenos Aires XXVII (1915) p. 39, fig. 3.— Majusculus, 250-500 μ alt., melleus; receptaculo 3-cellulari, cylindraceo, subhyalino; androsticho bicellulari in appendice 14-15-cellulari, 75-250 × 20-35 metiente producto; gynosticho quoque 2-cellulari, androsticho omnino adnato; perithecio percrasso, 100-125 × 50-75, infuscato, sursum obtusissimo, labio ventrali in cornu crasso, modice elongato divaricatoque, octomero, 150-200 × 30-35 producto.

Hab. in Laccobio nigriceps, prope Coneglanum Ital. bor.

3. **Autoicomyces melanocerus** Speg., Laboulb. ital. II in Anal. Mus. 3944
Nac. Buenos Aires XXVII (1915), p. 41, fig. 5. — Parvus, 200 μ altus; receptaculo trimero, hyalino, late obconoideo; androsticho 2-cellulari, in appendice cylindracea, 35-40 × 10, 5-6-mera producto, hyalino; gynosticho adnato, 3-cellulari quoque hyalino; perithecio subconoideo, 70 × 25, atro, opaco, ostiolo bilabiato, labio infero in cornu cylindraceo-sigmoideo, 60-65 × 5-6, atro producto.

Hab. in Hydroporo palustri, prope Coneglanum nec non in « Lago di Tarzo », Venet., Ital. bor.

4. **Autoicomyces fragilis** Speg., Laboulb. ital. II, in Anal. Mus. Nac. 3945
Buenos Aires XXVII (1915) p. 40 fig. 4. – Parvus, 200-250 μ altus, totus hyalinus; receptaculo subcylindraceo, tricellulari; androsticho bicellulari, in appendice crassiuscula, sensim leniterque attenuata, 150 × 15-20, nuda, fragillima, 15-16-mera, cellulis duobus supremis antheridiferis producto; gynosticho connato 1-cellulari; perithecio mutico, vix infuscato, cylindraceo-subsigmoideo, 75 × 35, superne obtuso, ostiolo obtuso, labio ventrali saepe breviter producto.

Hab. in Laccobio scutellari, prope Coneglanum, Ital. boreale.

5. **Autoicomyces platensis** Speg., Lab. Arg. in An. H. N. Buenos Air. 3946
1917, XXIX p. 467, fig. 9. — Parvus, cellulis pedicellaribus trinis infima minore ceteris sensim vix crassioribus, appendice achroa subbrevi retiuscula 6-8-cellulari facile decidua, perithecio elliptico-

subnaviculari dorso 10-11 mero convexo saturate infuscato ventre subplano 11-13-mero pallidiore.

Hab. in artubus Tropisterni ochripedis, La Plata, et Fr. lati, in Patagonia.— Alt. tot. 225-400 ; perith. 100-125 × 35-40.

6. **Autoicomyces bicornis** Thaxt., Proc. Amer. Acad. 1912, p. 214. 3947

Hab. in superficie infer. abdominis Berosi sp. v. aff. gen., Belgrano pr. Palermo Argent. — Perithec. 95-110 × 40-45 ; ejus appendix longior 60-100 μ, brevior 70-78 μ; appendix 135 μ long., receptaculum 80 × 35 ; long. tot. ad apicem perithecii 175-190 μ, ad apicem appendicis int. 310-370 μ.

CERATOMYCES Thaxt. — Syll. XI p. 455, XIV p. 736, XVI p. 693, XXII p. 17.

1. **Ceratomyces congener** Speg., Lab. Arg. in An. M. Nac. Buenos Aires, XXIX (1917) p. 472, fig. 14. — Pallide melleus; cellula basali tota hyalina; ceteris receptaculi margine dorsali zona nigra opaca lata, intus crenata, donatis; perithecio subcylindraceo-conoideo, seriebus parietalibus, 20-25 cellularibus, ostiolo subobliquo parum prominulo, sub ipso ventre cornu 1-3 mero erectiusculo vix sigmoideo ornato, appendice antheridiophora elongato subconica 8-10 cellulari, latere interno ramulis antheridialibus copiosis saepius bifidis praedita. 3948

Hab. in abdomine Tropisterni lati, Sierra de Painemal Patag. et Tr. ochreipedis, La Plata. — Alt. tot. 225-350 μ ; perith. 170-190 × 70-75.

2. **Ceratomyces erostris** Speg., Lab. Arg. in An. M. N. Buenos Aires, XXIX (1917) p. 474 fig. 15. — Pallide melleus ; cellula basali tota hyalina, secunda omnibus androstichi ed dimidiis gynostichi e latere dorsali opace nigris, ceteris totius microphyti pallide melleis; perithecio omnino exappendiculato subcylindraceo-conoideo, seriebus parietalibus 24-26-meris, ostiolo obtuso laevi ; appendice antheridiophora elongato-conoidea 8-10-cellulari, e latere interno vix prope basin, antheridiis parcis, filiformibus ornata. 3949

Hab. in abdomine et thorace Tropisterni lateralis, La Plata — Alt. tot. 230-250 ; perith. 135-140 × 45-50.

3. **Ceratomyces tristis** Speg., Lab. Argent. p. 477, fig. 19. — Mediocris, cellula basali hyalina, ceteris omnibus receptaculis nigris opacisque, postice secus basin appendicis antheridialis fere in cornu adnata productis; perithecio cylindraceo-conico subhyalino exap- 3950

pendiculato, ostiolo rotundato laevi terminato, cellulis serierum parietalium 14-15; appendice antheridiali mox decidua subgracili.

Hab. in abdomine Tropisterni collaris v. parani, in Museo Platensi osservati - Alt. tot. 200-225 μ; perith. 100-125 × 45-50.

4. **Ceratomyces aquatilis** Picard, Bull. Soc. Mycol. Fr. 1913, p. 560, t. XXIX f. 6, t. XXXI fig. 20. — Receptaculo brevissimo 40-45 μ longo e cellulis tribus efformato, supra cellula tertia 2-v. 3 alias cellulas sistunt perithecium et appendicem ferentes; perithecia ovoidea, 95 × 40, involucro e quatuor seriebus cellularum constituto, infra apicem appendicem corniculatam undulatam nigram, 80 μ longam gerente; sporidiis magnis, 50 μ long., fusoideis bilocularibus, loculis subconformibus; appendice e basi perithecii adnata cylindracea, simplice (?) — Colore hyalino, perithecio brunneolo, margine obscuriore, appendice corniculata infra nigra apice obscure brunnea. Totus fungus 135-140 μ longo. 3951

Hab. infra abdomine Hydrochoi carinati, Trappes Seine-et-Oise, Gallia.

5. **Ceratomyces rhizophorus** Thaxt., Proc. Amer. Acad. 1912, p. 215. 3952

Hab. in artu anter. sinistr. Tropisterni, Belgrano pr. Palermo, Argent. — Perithecium 100 × 40; appendix 135 × 15 (rupt.); recept. 50 μ, pes 20 μ, longit. total. ad apicem perithecii 150 μ.

6. **Ceratomyces ventriosus** Thaxt., Proc. Amer. Acad. 1912, p. 215. 3953

Hab. in superficie inf. abdominis Tropisterni, Belgrano pr. Palermo, Argent. — Perithecium 550-700 × 100-116 (inf.) et 65-75 (super.); appendix 250-350 × 30.

7. **Ceratomyces marginalis** Thaxt., Proc. Amer. Acad. 1912, p. 216. 3954

Hab. sub margine elythrae minuti insecti Hydrophylidi, Belgrano pr. Palermo, Argentina. — Uniformiter pellucide succineo-brunneus; perithecium 90-110 × 35-45, appendix longior 100 μ; receptaculum, pede incluso, 55-60 × 30; appendix 60 × 7; longitudo totalis ad apicem perith. 135-150, ad apicem appendicis 225 μ.

8. **Ceratomyces intermedius** Thaxt., Proc. Amer. Acad. 1912, p. 217. 3955

Hab. in margine sinistro thoracis Tropisterni sp., Belgrano pr. Palermo, Argentina. — Perithecium 310-390 × 80-105, basis 50-60 μ; appendix 105-170; receptaculum leviter succineo-tinctum 74-82 × 75-78, pedicellus 30 μ long.; appendix 200-45-48 (basi), longit. totalis 660 μ.

SYNAPTOMYCES Thaxt., Proc. Amer. Acad. 1912, p. 217. — Recep-

taculum indeterminatum, e cellularum superpositarum serie constans; seriei apex in cellulas binas collaterales productus; ex his altera cellula est separata a singula cellula minuta oriente e cellula basilari appendicis, altera vero est basis seriei exterioris formans parietem cellularem perithecii. Appendix constat e serie cellularum superpositarum, ramulos sparsos edente. Perithecium pluricellulare, indeterminatum, ventri a rostro non discreto, superne introrsum appendiculatum.

1. **Synaptomyces argentinus** Thaxt., l. c. p. 218. 3956

Hab. in margine sinistro thoracis Hydrocharitis sp., pr. Belgrano Palermo, Argentinae.— Perithecium 335 × 80-390 × 105; appendix sine ramulis terminalibus 110-120 μ; receptaculum 250-275 × 70-80; perithecii longitudo totalis 700-750.

COREOMYCES Thaxt. — Syll. XVII p. 924.

1. **Coreomyces argentinensis** Speg., Lab. Arg. p. 485, fig. 27. — Subhyalinus, brevis, ungue obconico v. hemisphaerico-obconico levi, stipite cellulis tribus sterilibus efformato, cellulas trinas tabulares contiguas, filamentis antheridialibus breviusculis gracilibusque ornatas fulcente, cellula pedicellari subcuboidea, perithecio clavulato superne rotundato ostiolo grosse cylindraceo-papillato coronato. 3957

Hab. in abdomine Corisae forcipitis prope La Plata, Argent. — Alt. tot. 225-275; perith. 100-110 × 35-40 (sine ped.).

2. **Coreomyces australis** Speg., Lab. Arg. p. 486, fig. 28. — Subhyalinus, elongatus, ungue brevi conoideo levi, stipite 8-9-mero articulis magnitudine ludentibus, minoribus saepius antheridiferis, cellulis 4 sequentibus contiguis tabularibus antheridiferis, antheridiis gracilibus, brevibus, cellula pedicellari elongata, perithecio submelleo lanceolato apice non papillato sed suboblique subtruncato-ostiolato. 3958

Hab. in margine anulorum abdominis Corisae forcipitis, pr. La Plata, Arg. — Alt. tot. 450-500 μ; perith. 140-150 × 42-45.

3. **Coreomyces subdivisus** Thaxter, Proc. Amer. Ac. of Sc., 54., 1918, p. 231. — Uniformiter undique pallide flavo-brunneo; infra perithecio cellulis cladophoris presentibus. Perithecium 80-88 × 28-30; appendicibus 125 long.; totus fungus 150-175 μ long. 3959

Hab. in inferiore parte abdominis Corisae sp., Conception Chile, America austr. — *C. Corisae* proximus.

4. **Coreomyces acuminatus** Thaxter, Proc. Amer. Ac. of Sc., 54., 1918, p. 231. — Subgracilis, subsigmoideus, apice abrupte acuminatus; 3960

appendicibus parcis, subbrevibus. Totus fungus 210 μ long., axe inf. 16 μ cr.; perithecio 80 × 28, cellula pedicellari 20 × 22.

Hab. ad marginem abdominis Corisae sp, Conception Chile. America austr.

5. **Coreomyces italicus** Spegazzini, Obs. microbiol. in An. Soc. Cient. Argentina t. 85., 1918, Extr. p. 13, cum icone. — Ita vocanda est *Coreomyces Corisae* Speg. nec Thaxt. 3961

6. **Coreomyces elongatus** Spegazzini, l. c. cum icone. — Ita vocanda est *Coreomyces incurvatus* Speg. nec Thaxter. 3962

EUZODIOMYCES Thaxt. — Syll. XVI p. 694.

1. **Euzodiomyces capillarius** Cépède et Picard, C. R. Ass. franc. Avanc. Sc., Reims 1907, p. 778; Bull. Scient. France et Belgique t. XLII, 1909, p. 263, tab. IV fig. 9; Bull. Soc. Mycol. 1913, p. 564. — Omnino hyalina; receptaculo angusto elongato subrecto, apicem versus incurvato e cellulis stratosis (40 circ. series efformantibus) constituto; peritheciis et appendicibus uno latere tantum dispositis; appendicibus nunquam ramosis, plus minus e basi curvulis, terminalibus longissimis flexuosis, omnibus septulatis, intricatis, peritheciis 80 μ circ. long., receptaculo 480 × 50, appendicibus majoribus 640, 2-3 μ latis. 3963

Hab. in elytris et abdomine Lathrobii multipunctati, ad ripas fl. Slack Ambleteuse, Pas-de-Calais, Galliae.

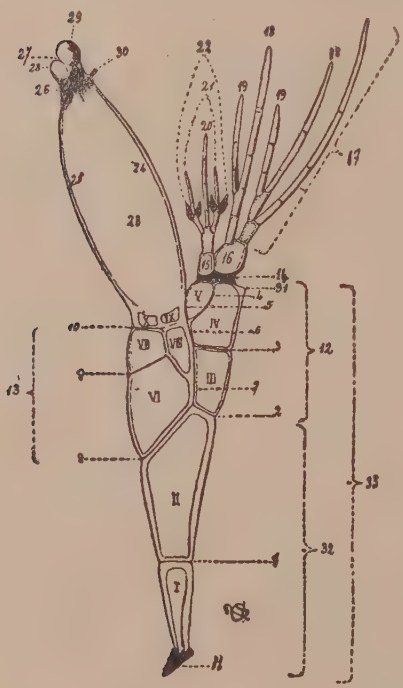
THRIPOMYCES Speg., Laboulb. ital. II, in Anal. Mus. Nac. Buenos Aires XXVII (1915) p. 71. — Receptaculum hyalinum lineare, primo abbreviatum hippocrepicum, serius elongatum suberectum, cellulis pluribus monostichis constitutum, tribus infimis crassioribus sterilibus, cum quarta vix angustiore, e latere antheridifera, et quinta magis angusta, etiam sterili, fere bulbum constituentibus, ceteris 7-9 subcylindraceis, nudis, maturando elongatis apice abrupte, perithecio solitario ovato, saepius curvulo, chlorino coronatis. Antheridia pauca, filiformia, simplicia.

1. **Thripomyces italicus** Speg., loc. cit. p. 72 fig. 38. — Caespitosus, tenerrimus, hyalinus, primo saepius hyppocrepicus subtorulosus, serius elongatus divaricatus sursum arcuatus, 300-1000 μ altus; stipitibus 11-13-meris, achrois, cellulis 4 basilaribus semper valde abbreviatis, crassioribus, basin bulbosam 50-125 × 25-40 simulantibus, ceteris gracilioribus, cylindraceis, initio brevibus, serius conspicue elongatis, ad septa non vel vix constrictis; ramulis antheri- 3964

diferis tenuibus, elongatis, 75-250 × 2-5, vix furcatis, e cellula quarta basali pleurogene fasciculatim exsurgentibus; peritheciis acrogenis, solitariis, conoideis, 65-150 × 20-50, saepius leniter inaequilateralibus et curvulis, basi truncatis, apice acutis, primo hyalinis dein chlorinis.

Hab. in Hydraena sp., prope Coneglanum, Ven., Ital. bor.

LABOULBENIA Mont. et Rob. — Syll. VIII p. 909, IX p. 1132, XI p. 450, XIV p. 730, XVI p. 682, XVII p. 918, XX p. 12 *).



**) I. Cell. basalis seu I. — II. Cell. praebasalis s. II. — III. C. geminata dorsalis infera s. III. — IV. C. gem. dors. supera s. IV. — V. C. subdorsalis s. V. — VI. C. gem. ventralis inf. s. VI. — VII. C. gem. ventr. sup. s. VII. — VIII. C. intermedia s. VIII. — IX. C. hypocarpa dors. s. IX. — X. C. hypoc. ventr. s. X. —

1. Septum basale v. I. — 2. S. subbas. v. II. — 3. S. androstichi v. III. — 4. S. subd. v. IV. — 5. S. intermed. superum v. V. — 6. S. intermed. medianum v. VI. — 7. S. interm. inf. v. VII. — 8. S. praebasale v. VIII. — 9. S. gymnostichi v. IX. — 10. S. hypocarpicum v. X. — 11. Unguis. — 12. Androstichum s. series cellularum receptaculi partem masculam fulcens. — 13. Gymnostichum s. series cell. recep. partem foeminam sustinens. — 14. Psallium s. annulum hyalinum (*Hyalo* —) v. nigrum (*Melano* —) androstichum coronans. — 15. Andropodium s. cellula aparatum antheridiferum gerens. — 16. Paraphysopodium s. cell. paraphyses gignens. — 17. Axis paraphysum primarius. — 18. Paraph. secundariae. — 19. Paraph. tertiariae. — 20. Axis antheridiophorus primarius. — 21. Axes antheridiophori secundarii. — 22. Antheridia. — 23. Perithecium. — 24. Perith. dorsum v. pars dorsalis. — 25. Perith. venter v. pars ventralis. — 26. Hy-

*) Cnfr. Faull, *Cytology of Laboulbenia*, in Annals of Botany, XXVI, apr. 1912, 4 tab.

**) Nomenclaturae explicationem partium et sectionum vastissimi generis *Laboulbeniae* cfr. apud Spegazzini, *Rev. Lab. argent.* 1917 in Anal. Mus. Nac. Hist. Nat. XXIX, p. 552-557 et fig. schem. p. 553.

postomum v. umbo perithecialis. — 27. Ostiolum. — 28. Ostioli labium ventrale. — 29. Ost. lab. dorsale. — 30. Trichogyni reliquiae. — 31. Angulus dorsalis. — 32. Pedunculus receptacularis. — 33. Receptaculum.

(Secundum Cl. C. SPEGAZZINI in l. c.)

Conspectus dichot. Sectionum gen. LABOULBENIAE (sec. SPEGAZZINI, Las Laboulb. argent., in l. c. p. 555).

1	Species ob perithecio v. receptaculo irregulares	*Zigolaboulbenia*	2
	Species omnibus partibus regulares . . .	*Eulaboulbenia*	7
2	Androstichum et gymnostichum disjuncti	*Cerajomyces*	
	Androstichum et gymnostichum conjuncti		3
3	Cellula I et II proliferantes et tunc parte pedicellari receptaculi 3-polimera . . .	*Misgomyces*	
	Cellula I et II regulares		4
4	Cellula V androstici proliferante . . .	*Pleocytia*	5
	Cellula V androstici simplice, regularis, semper paraphysibus destituta	*Haplocytia*	6
5	Psallium nullum	*Apsallia*	
	Psallium praesens (1-v.-plur.)	*Psalliophora*	
6	Cellulae VI-VIII connexae, III et IV regulares et subnormales in unam confluentes .	*Laboulbeniopsis* *Laboulbeniella*	
7 (2)	Perithecium et receptaculum appendicibus v. prominentiis variis praediti		8
	Perithecium et receptaculum appendicibus v. prominentiis variis destituti		14
8	Appendices v. prominentiae receptaculares v. paraphysariae raro peritheciales praesentes .	*Metalaboulbenia*	9
	Appendices v. prominentiae peritheciales tantum praesentes	*Paralaboulbenia*	12
9	Receptaculum verrucis, spinulis, gibbis ad perithecium quandoque effusis, praeditum ; apparatum paraphysum normale . . .	*Thelesoma*	
	Receptaculum normale, apparatum paraphysum anomalum		10
10	Axis paraphysum anormalis inflatus . . .	*Pachymastiga*	
	Axis paraphysum normalis plus minus elongatus . . .		11
11	Andropodium digitatum, corniculatum v. spathulatum	*Ceratodactyla*	
	Andropodium normale, axis paraphysum solitarium articulo peritheciiforme aucto . .	*Pseudoditheca*	

12 (8)	Perithecium verrucosum, gibbosum, corniculatum etc., sed ostiolo semper normali praeditum	*Theletheca*	
	Perithecium ostiolo anormali praeditum appendicibus variis ornatum	*Ceratotheca*	13
13	Psallium nullum v. indefinitum	*Aphanopsallia*	
	Psallium distinctum et visibile	*Psalliomela*	
14 (7)	Psallium nullum v. hyalinum	*Hyalopsallia*	
	Psallium semper distinctum et visibile . .	*Melanopsallia*	15
15	Apex androstici a gymnostico et a basi perithecii liber.	*Schizosoma*	
	Apex androstici gymnostico et perithecio connexus	. . .	16
16	Perithecia distincte pedicellata, androstico omnino libera	*Podocarpa*	17
	Perithecia sessilia, pedicello nullo . . .	*Apodotheca*	18
17	Paraphyses omnino nigrae, opacae, rigidae, subcarbonaceae	*Anthracotricha*	
	Paraphyses hyalinae v. plus minus leniter coloratae	*Malacotricha*	19
18	Receptaculum omnino nigrum v. opacum, cellula I. excepta	*Dichroma*	
	Receptaculum subhyalinum, pro parte tantum nigrescente , ...	*Subdichroma*	
19 (17)	Perithecium e basi ad apicem omnino liberum .	*Eleutherocarpa*	
	Perithecium cum androstico plus minus connexum	. . .	20
20	Perithecium usque ad apicem, v. parum infra, androsticho connexum	*Synandrocarpa*	
	Perithecium infra medium androsticho connexum	*Hemisyncarpa*	21
21	Paraphyses omnino nigrae, opacae et rigidae	*Anthracochaeta*	
	Paraphyses incolorae v. leniter coloratae	*Malacochaeta*	22
22	Paraphyses omnes rudimentales v. perithecio breviores	*Brachymastiga*	
	Paraphyses omnes v. nonnullae perithecium superantes	. . .	23
23	Paraphyses ex axi primario unico (v. 1-2 secundarios rudimentales praedito) constantes .	*Monomastiga*	
	Paraphyses ex axibus primariis plurimis constantes	. . .	24
24	Paraphyses ex axibus 2-3 praeditae, v. axi primario unico (et 1-2 secundarios distinctos praedita) constantes	*Oligomastiga*	
	Paraphyses ex axibus plus minus numerosis (ultra 3) constantes	*Macromastiga*	

1. **Laboulbenia Argutoris** Cépède et Picard, Bull. Scient. France Bel- 3965
gique t. 42., 1909, p. 260, tab. III fig. 4-5. — Perithecio receptaculo lateraliter connexo, parte superiore tantum libero, ovoideo, 95-120 × 40, cum receptaculo 200-250 μ longo, primum hyalino demum praecipue ad basim obscurato; trichogyno filamentoso, multicellulari, ramoso; receptaculo basi leniter incurvato, parietibus crassis praedito, cell. 2. omnibus longiore, 3. longiore quam latiore, 5. minima; appendice externa solitaria, crassa brevi simplici, 90 μ longa, interna solitaria, raro divisa perithecium vix superante; antheridiis brevibus inflatis, terminalibus, 4-5 congestis.

Hab. in Pterosticho (Argutor) interstricto, ad ripas fl. Slack, Ambleteuse (Pas-de-Calais), Gallia, etiam in Pedio siculo, Ficuzza (Palermo) (in Picard, l. c. t. 50., 1916-1917, p. 452). — *Lab. polyphagae* affinis.

2. **Laboulbenia gracilipes** Cépede et Picard, C. R. Ass. Franc. Avanc. 3966
Sc. Reims 1907, p. 778; Bull. Scient. France et Belgique, t. 42., 1909, p. 261, tab. III, fig. 7. — Tota olivacea, cell. 1. et 2. exceptis plus minus hyalinis; perithecio magno, medio inflato, 80 × 40, basi receptaculo adnato, apice applanato nigro-maculato poro medio apicali; collo infra et supra gracili medio parum inflato, cellula 2. longiori infra apice incurvata; appendicibus e cellulis basilaribus ortis, externa crassiori e basi divisa, interna minori etiam e basi divisa; totus fungus append. exceptis 170-180 μ longus.

Hab. ad elythras Bembidii minimi, ad ripas fl. Slack, Ambleteuse (Pas-de-Calais), Gallia. — *L. pedicellatae* proxima.

3. **Laboulbenia Thaxteri** Cépède et Picard, Bull. Scient. France et Bel- 3967
gique t. XLII, 1909, p. 260 tab. III fig. 6; Bull. Soc. Mycol. Fr. 1913, p. 544 t. XXIX p. 2-3. — Perithecio atro apicem versus anguste ovoideo 100 × 38, cum receptaculo 340-410 μ long., collo elongato angusto cellula 1. brevi 2. elongatissima efformato, receptaculo e basi cell. 3. et 6. subaequalibus parallelis sensim tenuiterque expanso; cell. 5. minuta subtrigona; appendicibus duobus, exteriore gracili septis transversis duobus inferioribus nigricantibus, interiore breviori.

Hab. in Tachypo flavipedi, Andrésy Seine-et-Marne (Picard), Compiègne (Bedel), Ducey Manche (Pasquet). — Proxima *L. gracilipedi* et *pedicellatae* sed distincta.

4. **Laboulbenia Notiophili** Cépède et Picard, Bull. Scient. France Bel- 3968
gique, t. 42., 1909, p. 259, tab. III fig. 1-3. — Tota brunneo-olivacea 195 μ longa; perithecio regulariter ovoideo 85-95 × 32, apice

angustato poro bilabiato, labiis inaequalibus; receptaculo cylindraceo basi incurvato, brunneo-olivaceo cell. 2. longiore, cell. 3. et 6. subquadratis, 5. minori; appendicibus paucis, externa solitaria crassa et longa, 320-350 μ, apicem versus sensim attenuata, cellulis subtorulosis efformata, internis 1-3, gracilibus brevissimis apicem receptaculi non attingentibus quandoque dichotomice divisis, antheridiferis; antheridiis elongatis plerumque duobus latera libus; sporis medio curvatis.

Hab. ad prothoracem, elythras, capitem Notiophili semipunctati, Mortain (Manche), Gallia (Abbé Pasquet).

5. **Laboulbenia Lichtensteini** Picard, Bull. Scient. France Belgique t. 50, 1916-1917, p. 449, tab. VI fig. 5 (an 6 ?). — Brunneo-olivacea hinc inde obscuriori, basi receptaculi subhyalina. Perithecio ovoideo-cylindraceo 130 μ longo, apice rotundato ostiolato, brunneo-olivaceo apicem versus nigro maculato, labiis hyalinis; sporis magnis 85 μ long.; cellulis receptaculi basali et subbasali cylindraceo-obconicis longitudine subaequantibus; cell. 3. obscuriori, 4. et 5. parvis subapplanatis, parte superiore receptaculi transverse sulcatula; appendicibus brevibus apicem perithecii non attingentibus, fragilibus caducis, mox collabescentibus. Totus fungus 280-300 μ long. 3969

Hab. in Cilleno laterali, Roscoff (Finistère), Gallia (J. Lichtenstein), nec non prope Carteret (Manche) (Picard) et Brest (Perris). — *Lab. pedicellatae* Th. et *L. luxurianti* Pey. proxima.

6. **Laboulbenia Achenii** R. Maire, Bull. Soc. Hist. Nat. Afrique du Nord, t. 11, 1920, Extr. p. 28, fig. 7. — Receptaculo praeter cellulam basalem subhyalinam laevem dilute brunneo-verrucoso; cellula basali obconica, longiuscula; cellula subbasali brevi, lata; cellulis androstichi lateraliter dejectis, perithecio fere perpendicularibus; cellula 6 applanata brevissima; cellula 3. brevi, perithecii basim attingenti; cellulis 4. et 5. parvis, subquadratis, septo subobliquo separatis; cellulae 5. facie interna libera; psallio nigro, crasso; appendices externae dilute brunneolae, basi et apice, subhyalinae, simplices, divaricatae, cellulis superioribus elongatis; appendices internae cellula inferiore minima, brevissima, antheridia 1-2 gerenti. Perithecio libero, dilute brunneo, ovoideo, apice attenuato; ostioli labiis vix inflatis, rectis, apice hyalinis, basi maculis nigris parvis praeditis; ascosporae fusiformes, 1-septatae, loculo superiore inferiore triplo longiore. — Totus fungus 142-158 μ alt. 3970

Hab. in Achenio tenello, pr. Hipponem Reg. Numidiae, Africa bor.

7. **Laboulbenia marina** Picard, C. R. Seances Soc. Biologie t. LXV, 1908, p. 584, Bull. Soc. Mycol. de Fr. 1913, p. 546, tab. XXXII, fig. 21. — Receptaculo rigido e cellula basali et subbasali elongatis efformato supra eroso subcupuliformi perithecium et appendices gerente; perithecio ovoideo-conoideo, 76 μ longo, translucido, apice attenuato et rima ostiolari eccentrica donato; appendicibus e cellulis duobus ortis, exteriori crassiori; 4 appendicibus pro quoque cellula, brevibus transverse nigro-septatis; sporidiis bilocularibus 26 μ long., cellula distali secties breviori quam basali. — Colore pallide flavo. Totus fungus 150 μ long. 3971

Hab. in Aepo Robini, insula Tatihou prope St. Vaast-la-Hougue, Manche, Gallia.

8. **Laboulbenia antarctica** R. Thaxter, Proc. Amer. Ac. of Sc. 54., 1918, p. 229. — Subuniformiter pallide brunneo-olivacea demum obscuriori, cellula basali pallidiori, caeteris partibus receptaculi punctatis v. maculatis; appendicibus forma conspicuis. Perithecio 75-85 × 25-32; sporis 35 × 3,5; receptaculo e cellula basilari 9-105 μ; appendicibus longioribus 130 × 3,5-5; totus fungus e apice perithecii 150-175 μ, maxima latitudine 40-45 μ. 3972

Hab. ad basim coxarum? Antarctide sp., Punta Arenas, Fret. Magellani, Chile America austr. — *L. orientali* affinis.

9. **Laboulbenia australis** Thaxt., Proc. Amer. Acad. 1912, p. 202. 3973

Hab. in toto corpore Apanes spec., Tucuman, Argent. — Perith. 110 × 40, appendix longior 250 μ; receptac. 100-235 μ; long. total. ad apicem perith. 250-300 μ.

10. **Laboulbenia fuscata** Thaxt., Proc. Amer. Acad. 1912, p. 197. 3974

Hab. in artubus Argutoris bonariensis, Ins. Santiago pr. La Plata.— Perith. 110 × 40; receptac. 135 × 40; tot. longit. 215 μ.

11. **Laboulbenia bonariensis** Thaxt., Proc. Amer. Acad. 1912, p. 199. 3975

Hab. in locis variis corporis Argutoris bonariensis, La Plata, Buenos Aires, Llavallol, Temperley, Argent. — Sporidia 70 × 6; perith. 135 × 35 usque ad 210 × 55; receptaculum 235-335 × 50-70; appendix longior 200 μ; long. tot. ad apicem perithecii 300-500 μ.

12. **Laboulbenia granulosa** Thaxt., Proc. Amer. Acad. 1912, p. 198; Speg., Lab. Arg. fig. 158. 3976

Hab. in artubus Argutoris bonariensis, Insula Santiago pr. La Plata et Argutoris urugayaci, Montevideo (Speg.)— Perith. 110 × 40; receptac. 135 × 40; longit. total. 215 μ.

13. **Laboulbenia lutescens** Thaxt., Proc. Amer. Acad. 1912, p. 200; *Lab.* 3977

fumosa Speg. non Thaxt.

Hab. in margine exter. elytrae sinistrae Argutoris bonariensis, Buenos Aires, Temperley et Llavallol Argent. — Sporidia 78 × 7; perith. 125-145 × 35-40; receptac. 100-135 μ; long. total. ad apicem perithecii 225-275 μ.

14. **Laboulbenia subinflata** Thaxt., Proc. Amer. Acad. 1912, p. 199; Speg. 3978
Lab. Arg. fig. 170.

Hab. in margine sinistro prothoracis sup. Argutoris bonariensis, Buenos Aires, Llavallol Argent. et Arg. postici, Arg. confusi et Arg. bonariensis, Misiones, Tucuman, Sta Catalina et La Plata (Spegazzini). — Sporidia 55 × 5; perith. 175-185 × 45-50; receptac. 310-415 × 62-78, cellula subbas. latior 187 × 75; appendices 200-215; longit. tot. ad apicem perithec. 350-585 μ.

15. **Laboulbenia andina** Thaxter, Proc. Amer. Ac. of Sc. 54., 1918, 3979
p. 230. — Olivaceo-brunnea, infer. parte perithecii obscuriori; minuta, brevi, crassa, perithecio distincte longiori et latiori quam receptaculo et regione basali; cellula basali lata pallida, subbasali minori et angustiori, septis appendicum externarum simplicium nigris. Perithecio 65-70 × 24-28; sporis 25 × 3; appendicibus 28-35; totus fungus 108-112 μ long., a cellula basilari 42 μ.

Hab. in pedibus Bembidii, Baños de Apoquindo Chile, America austr.

16. **Laboulbenia flexata** Thaxt., Proc. Amer. Acad. 1912, p. 203. 3980

Hab. in margine inf. sinistr. prothoracis Brachini sp. in Ins. Santiago La Plata (Spegazzini). — Perith. 155-200 × 48-55; recept. 275-390; appendix exter. 135-155 × 40, longior 200 × 50; inter. append. 50-60 × 12, ramuli longiores 120-140 μ.

17. **Laboulbenia Giardi** Cépède et Picard, Bull. Scient. France et Bel- 3981
gique t. XLII, 1908, p. 258, tab. III fig. 10-11; Bull. Soc. Mycol. Fr. 1913, p. 543, fig. 8. — Pallide flava 280-386 μ longa; perithecio maturo parum obscuro receptaculo concolori, elongato regulari subcylindrico 140-180 × 60-65, apice contracto circa porum nigrescente; receptaculo recto, subtrigono, basi attenuato, parietibus infra appendicibus crassis; cellulis 1-2, longioribus quam latioribus, 3-4, parallelis; appendicibus circ. 8 e basi divergentibus, externa infra obscurata, sporidiis fusoideis parum curvatis, 64 × 8, cellulis duobus dissimilibus efformatis, superiori 40 μ circ. longa, inf. circ. 15 μ.

Hab. in Bradycello (Dichirotricho) pubescenti, Corolles Manche (A. Pasquet) et Ambleteuse Pas-de-Calais (Picard),

in Dichirotricho obsoleto, Palavas Hérault (Picard).

18. **Laboulbenia Pasqueti** Picard, Bull. Soc. Mycol. Fr. 1913, p. 550, t. XXXII p. 22. — Receptaculo 125 μ longo, infra pedunculo brevi donato, supra perithecio adhaerenti; pedunculo e cellula basali brevi et pro parte e cellula subbasali efformato; perithecio magno subcylindraceo 90 × 36-40, supra tantum libero, infra et lateraliter receptaculo adnato, apice abrupte constricto rotundato; e cellula basali nigra anuliformi cellulis duobus elongatis, interiore minore, ortis, appendices elongatas multiloculares simplices gerentibus. — Colore flavo-succineo et parum brunneo; cellulis III et IV receptaculi maculis transversis brunneis donatis; perithecio infra collo maculis duobus nigris praedito; appendicibus flavo-succineis. 3982

Hab. in Chlaenio variegato, Tournus Saone-et-Loire Gallia.

19. **Laboulbenia Deltomeri** Maire, Bull. Soc. Hist. Nat. Afrique du Nord, t. VII, 1916, p. 30, tab. I, fig. 1. — Maior (a pede usque ad apicem perithecii 410 μ, appendices usque ad 550 μ long.). Perithecii oblongi, 190 × 58, olivaceo-brunnei, basi et sub ostiolo pallidi, longitudinaliter sulcati, ostiolo abruptiuscule constricto; papillae ostiolares basi atratae, labiis hyalinis. Ascosporis ad $^1/_4$ inferiorem 1-septatis, hyalinis, laevibus, utrinque acutis, 75 × 3. Receptaculo obconico, 220 μ long., melleo, subtillime verruculoso, in pariete externa cellularum III et IV brunneo-suffuso. Appendicum pedicello e cellulis IV et V constituto, a perithecio divaricato; appendicibus perithecium valde superantibus, psallio (insertionis cellula) atrato, crasso; appendicum cellulis basalibus valde inaequalibus, appendicis externis cellula basali multo maiore. Appendice externa basi subhyalino dichotome ramoso, ramis a basi vel a regione supra-basali brunneis. Appendice interna iuvenili breviter ramosa, antheridifera, adulta longe ramosa et antheridiis exoletis, sterili. 3983

Hab. in elytris Deltomeri punctatissimi Fairm., Djebel Tamesguida Algeria, Africae bor. (P. de Peyerimhoff).

20. **Laboulbenia arietina** Thaxt., Laboulb. on Crysom. 1914, p. 36. 3984

Hab. in elytris Diosonychae recticollis et D. australiacae, Guatemala (Kellerman) et Trinidad. — Perith. 100-140 × 20-25; appendix termin. 18-25 μ; receptac. 60-100 × 24-28; appendix longior 150-175 μ; long. totalis ad apicem perithecii 160-240 μ.

21. **Laboulbenia Dolicaontis** R. Maire, Bull. Soc. Hist. Nat. Afrique du 3985

Nord, t. 11., 1920, Extr. p. 26, fig. 6. — Receptaculo verruculoso dilutissime brunneolo; cellula basali et cellula subbasali subaequilongis; cellula sexta subelongata; cellula 3. perithecii basim vix attingenti; cellulae 5. facie interna sursum libera; cellula 4. majore, a cellula 5. minore septo recto, psallio nigro perpendiculari, separata. Appendices externae simplices, divaricatae, cellulis inferioribus subaequalibus, dilutissime brunneolis, superioribus subhyalinis; appendices internae, cellula inferiore parva, brevi, 2 ramulos antheridiferos breves gerenti. Perithecio praeter basim libero, dilutissime brunneolo, subfusiformi, laevi, apice laeniter, attenuato; ostioli labiis inflatis, incurvis, apice hyalinis, basi nigro-maculatis; ascosporae fusiformes uniseptatae loculo superiore inferiore duplo longiore. — Totus fungus 300-360 μ alt.

Hab. in Dolicaonte densiventri Fauvel, prope Hipponem Reg. Numidiae, Africa bor.

22. **Laboulbenia marginata** Thaxt., Proc. Amer. Acad, 1912, p. 205. 3986

Hab. in superf. inferiori abdominis Galeritae Lacordairei, Argentina, (ex Museo Nacional n. 1428). — Perith. 250-275 × 52, excluso pede; ped. 58 × 30; receptac. 190-200 × 90; appendices ad apicem ramulorum 175 μ; antheridium 24 μ, cellula ejus basilaris 20 μ; long. totalis ad apicem perith. circ. 500-510 μ.

23. **Laboulbenia inflexa** Thaxt., Proc. Amer. Acad. 1912, p. 204 (*L. infleta*). 3987

Hab. in elytra sinistra Galeritae spec. nigrae, La Plata (Spegazzini). — Perith. 110-128 × 35-38, pedic. 15-20 × 8; recept. 98 × 40-45; cellula ejus basil. 45-50 × 20; appendices 20 μ, ramuli 50-75 μ; antheridium 20 μ, ejus pedic. 10-12 μ.

24. **Laboulbenia sordida** Thaxt., Proc. Amer. Acad. 1912, p. 206; Speg. Rev. Lab. Arg. fig. 126 i. 3988

Hab. in apice elytrae Galeritae Lacordairei etc., La Plata — Perith., dempto pedicello, 215-235 × 45-47, pedicell. 27-31 × 27; receptac. 215 × 66; appendices ad apices ramulorum 160 μ; antheridia 23-27 × 6.

25. **Laboulbenia funeralis** Thaxt., Proc. Amer. Acad. 1913 p. 208, Speg. Rev. Lab. Arg. fig. 115. 3989

Hab. in margine elytrae Gyrini ovati, pr. Palermo et La Plata Argent. — Perithecium 110-155 × 35-40; appendix termin. longior 20 μ; long. tot. ad apicem perithecii 235-350, latitudo maxima 38-68 μ.

26. **Laboulbenia Grylli** Thaxt., Proc. Amer. Acad. 1915, p. 45. 3990

Hab. in superf. inf. abdominis Grylli albifrontis, Samarang, Java. — Perith. 500-750 × 100-120, apex 70-75 × 18, rostrum 50 μ (basi), 32 μ vertex; sporidia 45 × 7; recept. cell. basil. 160 × 70, subbasal. 550-780 × 60; long. tot. ad apicem perithecii 1300-1700 μ.

27. **Laboulbenia subulata** Thaxt., Proc. Amer. Acad. 1915, p. 46. 3991

Hab. in superf. inf. abdominis Grylli burdigalensis-Cerisyi, Indo-Malaya. — Perith. 500-700, venter 120 × 58, apex 48-20; sporidia 28 × 4; receptac. 275-400 × 58.

28. **Laboulbenia idiostoma** Thaxt., Laboulb. on Chrysom. 1914, p. 28. 3992

Hab. in antennis Halticae jamaicensis, Eunery, Hayti (Mann). — Perith. 122 × 30-35; receptac. 70-85 × 35-42, appendix longior 200 μ; long. tot. ad apicem perithecii 175 μ.

29. **Laboulbenia fuliginosa** Thaxt., Laboulb. on Chrysomel. 1914, p. 28. 3993

Hab. in elytris et superf. inf. Halticae plebejae, H. amethystinae, H. jamaicensis et H. spec., Hayti, Cuba, Vera Paz, Jamaica. — Perith. 100-125 × 40-48; sporidia 55 × 5,5; receptaculum 150-200 × 45-52; appendix longior 95; long. tot. ad apicem perithecii 60-90 μ.

30. **Laboulbenia Halticae** Thaxt., Laboulb. on Chrysomel. 1914, p. 29. 3994

Hab. in Haltica sp., Kamerun (Schwab) et Systena Deyrollei, Port of Spain Trinidad. — Perith. 70-90 × 25-30; receptac. 85-125 × 25-30; appendix longior 150 μ, rarius 227 μ; longit. tot. ad apicem perithecii 125-210.

31. **Laboulbenia funebris** Thaxt., Laboulb. on Chrysomel. 1914, p. 44. 3995

Hab. in elytris Halticae sp. (?), Guatemala (Kellerman).— Perith. 75-80 × 25; sporidia 45 × 5; appendix longior 140-150; long. tot. ad apicem perithecii 125-160, latitudo maxima 35 μ.

32. **Laboulbenia cristatella** Thaxt., Laboulb. on Chrysom. 1914, p. 43. 3996

Hab. in superf. inf. Halticae scutellatae, Trinidad, Asphaerae Siebersii et Lacticae nigricipitis, Para Brasiliae. — Perith. 60-76 × 18-22; recept. 50-64 × 22-28; appendix longior 125 μ; tot. long. ad apicem perithecii 100-140 μ.

33. **Laboulbenia Hermaeophagae** Thaxt., Laboulb. on Chrysom. 1914, pag. 32. 3997

Hab. in apice elytrae Hermaeophagae sp., Port of Spain Trinidad. — Perith. 80-25; sporidia 50 × 5; receptac. 70-80 × 30; appendix longior 70 μ; long. total. ad apicem perithecii 150-175 μ.

34. **Laboulbenia Heteroceratis** Thaxt., Proc. Amer. Acad. 1912, p. 207; Speg., Rev. Lab. Argent. fig. 120. 3998

Hab. hic illic in corpore Heteroceratis ciliat icollis et validi, Sta Catalina, La Plata (Spegazzini) et Kansas (A. Stewart). — Perith. 110-120 × 35-40; receptac. 156-235 μ; appendix 50-60 μ; long. total. ad apicem perithec. 220-240 μ.

35. **Laboulbenia crispata** Thaxt., Proc. Amer. Acad. 1917, p. 719. 3999

Hab. in abdomine Hippelatis, Panama. — Perith. 85 × 22, processus termin. 10-12 × 3,5-4; recept. ad cell. insert. 120 μ, appendix 225; long. tot. ad apicem processus 175.

36. **Laboulbenia anguifera** Thaxt., Proc. Amer. Acad. 1917, p. 720. 4000

Hab. in variis partibus Hippelatis, Grenada. — Sporidia 50 × 3,5; perith. 100-130 × 24-30; incl. basi; cell. bas. et subbas. 218-245 × 14-18, appendices longiores 210.

37. **Laboulbenia Lacticae** Thaxt., Proc. Amer. Acad. 1912, p. 195; Speg., Rev. Lab. Arg. fig. 127. 4001

Hab. in apice elytrae, articulis abdominis Lacticae varicornis v. aff. spec., Palermo et Lact. nigricipitis La Plata, Argentina. — Sporidia 45 × 3,5; perith. 90-100 × 24-28; receptac. 80 × 15 v. 155 × 22; appendices longiores 135-150 μ; long. total. ad apicem perith. 175-280 μ.

38. **Laboulbenia Lagarocerinus** Thaxter, Proc. Amer. Ac. of Sc., 53., 1918, p. 703. — Cellula basali angulum rectum efformanti, inflata, duplo longiore quam latiore, ad substratum depresse adhaerenti, pallide brunnea; axi longo robusto erecto; appendicibus olivaceis erectis v. oblique incurvatis 35 μ circ. long.; peritheciis rectis v. ambitu subirregularibus 75-80 × 20-22; totus fungus, I cellula excepta, 140-165 μ long. 4002

Hab. ad alas Lagarocerini sp. [Dipt.], Gambia River Africa trop. (Dr. Wolbach). — Ob cellula basali forma aberranti praedistincta species. Structura est typus *Ceraiomyces*.

39. **Laboulbenia Lathropini** Thaxt., Proc. Am. Acad. 1912, p. 193. 4003

Hab. in superf. abdominis Lathropini fulvipedis, Llavallol Argentina. — Sporidia 75 × 8; perithec. 150-175 × 45-50; receptac. 120-155 μ; appendix longior 900 × 16; long. tot. ad apicem perith. 900 × 16. — var. **phrynostoma** Speg., Rev. Laboulb. Arg. p. 612, f. 144 b. — A typo ostiolo transverse compresso late hiante, apice androstichi libero, paraphyse abbreviata ramulosaque nec non parte supera cellulae basalis tumida atque infuscata recedit. — *Hab.* frequens in superficie inf. capitis Lathropini fulvipedis, Rosario de Sta Fe Argent. — Perith. 130-175 × 40-45; alt. tot. 300-500 μ.

40. **Laboulbenia rhinoceralis** Thaxt., Laboulb. on Chrysomel. 1914, pag. 24. 4004

Hab. in elytris Lemae gracilis, Para Bras. et Lemae sp., Trinidad et Surinam (Rover). — Perith. 90-120 × 20-25, ejus processus rhinoceronteus 18 × 6; sporidia 35 × 3,5; receptaculum 52 × 28; appendix longior 52; long. tot. ad apicem perithecii 125-175 μ.

41. **Laboulbenia Hottentottae** Thaxt., Laboulb. on Chrysomel. 1914, p. 26. 4005

Hab. in elytris etc. Lemae Hottentottae, Zanzibar Africae orient. — Perith. (excl. cellula basilari) 90-125 × 18-25; receptac. 90-110 × 25-32; appendix longior 120; long. totalis ad apicem perithecii 160-200 μ.

42. **Laboulbenia Papuana** Thaxt., Laboulb. on Chrysomel. 1914, p. 23. 4006

Hab. in elytris Lemae sp., Nova-Guinea. — Perith. 100-125 × 25-58; appendix longior 110 μ; receptacul. incl. processu et excl. pede 85-100 × 50-60; long. tot. incl. pede 200-228 μ.

43. **Laboulbenia Manobiae** Thaxt., Laboulb. on Chrysomel. 1914, p. 33. 4007

Hab. in apice elytrarum Manobiae abdominalis, Madagascar (?) — Perith. 75 × 25; append. 140 μ; receptac. 70-80 × 20; longit. total. ad apicem perithecii 145 μ.

44. **Laboulbenia Monocestae** Thaxt., Laboulb. on Chrysomel. 1914, pag. 39. 4008

Hab. in artubus Monocestae atricornis, Manaos Amazoniae (Mann). — Perith. 85-125 × 25; recept. 50-55 × 25-30; appendix longior 175 μ; longit. total. ad apicem perithecii 140-175 μ.

45. **Laboulbenia Monocrepidii** Thaxt., Proc. Amer. Acad. 1912, p. 197, Speg. Lab. Arg. fig. 162. 4009

Hab. in elytris Monocrepidii picti, Sta Catalina, et Monocrepidii sp., Palermo et Llavallol Argentina. — Sporidia 75 × 4,5; perithec. 120-135 × 40-45; receptac. 150-225 μ; appendix longior 80-110; long. total. ad apicem perithecii 250-325 μ.

46. **Laboulbenia alpestris** Picard, Bull. Soc. Mycol. Fr. 1913, p. 552, tab. XXXII fig. 23. — Receptaculo valde elongato, angusto, cellula subbasali basali duplo longiore, caeteris brevioribus, cellula quinta parva subtriangulari; perithecio brunneo-nigro ovoideo medio latiori apice obtuso rotundato, 85-90 × 30, ostiolo apicali hyalino, labiis depressis circumdato; appendicibus brunneis circa medium perithecii ortis e duobus cellulis ortis, cellula exteriori appendice unica simplice, 250-260 μ longa, interiori longitudine breviori appendice unica v. duplici donata, antheridia 2-3 gignenti; colore 4010

brunneo-nigro opaco, cellulis receptaculi I et II subhyalinis IV et V subnigris. — Totus fungus 330-340 μ long.

Hab. ad helitras et prothoracem Nebriae castaneae et Gyllenhali, M. Cenisio N. castaneae, Mt. Joli Sabaudia.

47. **Laboulbenia partita** Thaxt., Laboulb. on Chrysomel. 1914, p. 34. 4011

Hab. in elytris etc. Nisotrae dilectae, N. Chapuisi et sp., Kamerun et Madagascar. — Sporidia 40 × 3,5; perith. 75-85 × 32; appendix longior 85 μ; receptac. 135 × 25; long. tot. ad apicem perith. 140-250.

48. **Laboulbenia Nodostomae** Thaxt., Laboulb. on Chrysom., Proc. Am. 4012
Ac. Arts Sc. 50., 1914, p. 30.

Hab. in apice elytrae Nodostomae sp., Mindanao Ins. Philipp. — Perithec. 60-65 × 25; sporidia 40 × 4; receptac. 80 × 35; appendix longior 175 μ; long. tot. ad apicem perithecii 130 μ.

49. **Laboulbenia armata** Thaxt., Laboulb. on Chrysomel. 1914, p. 40. 4013

Hab. in elytris Oedionychi sublineati, Teapa Mexico. — Perithec. 120-125 × 24 30; processus corniform. 12-14 μ long.; receptac. 70-80 × 25; appendix longior 175-210 μ; long. tot. ad apicem perithecii 175-210 μ.

50. **Laboulbenia brasiliensis** Thaxt., Laboulb. on Chrysom. 1914, p. 27. 4014

Hab. in artubus et elytris Oedionycho speciei affinis, Rio de Janeiro Bras. — Perith. 130-158 × 40-48; recept. 175 × 52; appendix longior 160; long. total. ad apicem perithecii 350-380 μ.

51. **Laboulbenia Oedionychi** Thaxt., Laboulb. on Chrysomelid., in Proc. 4015
Am. Ac. Arts Sc. 50, 1914, p. 32.

Hab. in elytris Oedionychi nov. sp., Manila Ins. Philipp, (Banks). — Perith. 80-85 × 20-24; sporidia 48 × 4; receptac. 90-140 × 28; appendix longior, exter. 175-230; inter. 35-80; longit. tot. ad apicem perithecii 140-210 μ.

52. **Laboulbenia paludosa** Picard, Bull. Soc. Mycol. 1913, p. 548 t. XXIX 4016
fig. 4. — Receptaculo recto 200-205 μ longo e cellulis I et II efformato cellulis III et IV contigue dispositis longitudine subconformibus, cellula V breviori apice praecedenti insinuata; perithecio basi receptaculo adnato breviori subcylindraceo 95 × 45, supra infra collo constricto apice labiis rotundatis diviso; cellulis perithecii spiraliter dispositis; appendicibus binis v. ternis e quoque cellula ortis 50-65 μ long., 2-3 locularibus, raro ramosis, loculis cylindraceis septis nigris limitatis. — Colore plus minus intense olivaceo.

Hab. ad helitras Oodis gracilis, Vendres prope Béziers, Herault Gallia.

53. **Laboulbenia abyssalis** Maire, Bull. Soc. Hist. Nat. Afrique du Nord t. VII, 1916, p. 21 fig. 3. — Media (250-280 μ alta); perithecii oblongi 100-112 × 37-40, dilute brunneoli ostiolo abruptiuscule constricto; papillae ostiolares basi atro maculatae, labiis hyalinis. Ascosporis ad $^1/_4$ inferiorem uniseptatis hyalinis laevibus, utrinque acutis, 42 × 4,5. Receptaculo longe obconico, 200-220 μ longo, non constricto, dilute brunneolo, in cellularum 3. et 4. parte externa plus minusve brunneo-suffuso, cellula basali excepta verrucoso; cellulis 3., 4., 5. et perithecio connatis; cellula 5. subtriangulari parva (9-11 × 5-6); psallio (insertionis cellula) atrato, tenui. Appendicum cellulis basalibus valde inaequalibus, cellulis basalibus, appendices externae cellula basali multo longiore sed vix crassiore. Appendices externae vix ramosae, parte inferiore tricellulare, crasse tunicata, plus minusve et praecipue extus brunneo suffusa, plus minusve persistente, parte superiore e cellula dolioliformi dilute brunneola inferiore et cellulis elongatis hyalinis constante. Appendice interna breviter ramosa, antheridifera, ramis sterilibus nullis, hyalina. 4017

Hab. in elytris et pronoto Oreocyis Bedeli Peyerh., Djurdjura Algeria Africa bor. (P. DE PEYERIMHOFF).

54. **Laboulbenia Muiriana** Thaxter, Proc. Amer. Ac. of Sc., 53., 1918, p. 703. — Pede bene evoluto, cellula basali brevi, hyalina infra septo abrupte latiori; cellula subbasali sublatiori, hyalina punctata, recta 50 × 16; cellulis II-VI et cellula basali flavis et obscure punctatis; axe perithecii cum receptaculo angulum acutum efformanti; perithecio flavo, basi leniter inflato apice factura peculiari praedito, 60-70 × 18; receptaculo 88 μ; appendicibus 368 μ long., totus fungus 115 μ long. 4018

Hab. ad basim cruris post. e grege Oscinidarum [Dipt.], Lalok River, Nova Guinea britannica, Africa trop. (F. MUIR). — *L. cristatae* proxima sed punctuatione, appendicibus longissimis et apice peculiariter efformato praedistincta species.

55. **Laboulbenia Pachylophi** Thaxter, Proc. Amer. Ac. of Sc., 53., 1918, p. 704. — Erecta v. leniter curva; perithecio et cellula basali appendicum externarum obscure et translucide olivaceo-brunneis; cellula basali hyalina infra inflata et pede bulboso praedita; perithecio erecto et axe quandoque leniter divergenti infra olivaceo-brunneo minute granuloso-punctato; ventre vix leniter inflato apicem versus angustato, 60-65 × 22; appendicibus 70 μ long.; totus fungus 120-140 μ longus; pede bulboso 16 μ. 4019

Hab. ad crura Pachylophi frontacis [Dipt.], Killi-

mandjaro Africa or.

56. **Laboulbenia pectinulifera** Thaxter, Proc. Amer. Ac. of Sc., 53., 1918, p. 706. — Praecipue ad basim leniter curvula subtus ventre et cellula insertionis omnino alba v. demum brunneola; pede normali crasso, cellula basilari leniter inflata connexo; appendicibus externis fortiter divergentibus, curvulis, tricellularibus, apice caespitoso-flabellatis lateraliter plus minus pectinuliferis; perithecio supra basim leniter inflato 70-75 × 18-24, sporidiis 35-40 × 3; appendicibus 60-64 μ long., cellulis tribus basilaribus 35 μ; totus fungus ad apicem perithecii 100-150 μ long. 4020

Hab. ad thoracem et alas? Physogeniae sp. [Dipt.], Kamerun Africa occ. — *Lab. clavuliferae* proxima.

57. **Laboulbenia clavulifera** Thaxter, Proc. Amer. Ac. of Sc., 53., 1918, p. 702. — Erecta; cellula basali et subbasali recta v. curvula; pede normali bene evoluto; cellula basali hyalina parum longiori et a subbasali, brunneola, septo plerumque obliquo separata; cellulis 3. et 6. subaequalibus et oppositis, 4. et 5. fere aequalibus v. 5. angustiori et parum longiori. Perithecio omnino olivaceo, basi parum pallidiori, ventre leniter inflato, apice angustato obtuso, 70-88 × 18; sporis circ. 34 × 2,5; appendicibus ab apice ramulorum 70 μ long. axe 42 × 12; totus fungus 150-225 μ long. 4021

Hab. ad crura? Physogeniae sp. [Dipt.], Kamerun Africa trop. — Structura excepta *Lab. pectinuliferae* similis.

58. **Laboulbenia Psilina** Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, p. 708. — Leniter sigmoidea ventre flavido-brunneo, laxe crassiuleque punctata, cellula basilari pallidiori et punctata, cellula basilari appendicum externarum obscure olivacea, antheridiis pallidioribus caeterum subhyalina; perithecio divergenti, ventre translucido infra leniter inflato 50-55 × 18, sporidiis circ. 28 × 3; appendicibus e apice ramusculorum 55-70 μ long., totus fungus 120-140 μ long., cellula subbasali 50-62 × 18. 4022

Hab. ad superficiem abdominis? Psilae sp. [Dipt.], Kamerun Africa. — Proxima *L. pectinuliferae*, sed forma generali, colore, caractere ramusculorum appendicum diversa.

59. **Laboulbenia helicophora** Thaxt., Proc. Amer. Acad. 1915, p. 43. 4023

Hab. in artubus anterioribus Pericalli sp., Java (Rouyer). — Perith. 175 × 40-45, duae appendices marg. expansae 64 μ; appendices longiores 150 μ; recept. 275-315 × 78-85; long. tot. ad apicem perith. 390-425.

60. **Laboulbenia Podontiae** Thaxt., Laboulb. on Chrysom. 1914, p. 36. 4024

Hab. in elytris P o d o n t i a e l u t e a e et P o d. 14-p u n c t a t a e, Hong Kong et Himalaya. — Perith. 70-100 × 18-20; sporidia 55 × 3; rèceptac. 70 × 24-28, usque ad 100 × 28; appendices 70 μ; long. tot. usque ad apicem perithecii 140-160, subinde usque ad 230.

61. **Laboulbenia slackensis** Cépède et Picard, C. R. Ass. Franc. Avanc. Sc. Reims 1907, p. 775, Bull. Scient. France et Belgique t. XLII, 1908, p. 257 tab. III fig. 8-9, Bull. Soc. Mycol. 1913, p. 542. — Tota pallide flavo-straminea 300 μ longa; perithecium magnum subovoideum 130-140 × 60, apice circa ostiolum bilabiatum nigro-maculatum abrupte contractum; receptaculum crassum, cella 1.-2. longiore quam latiore, 2. subpentagonali, cell. 3. subquadrata, 4. et 5. minoribus subquadratis parallele dispositis, 6. magis lata quam alta; cellula antheridifera nigra; appendicibus gracilibus medio dichotomice divisis; antheridiis 4-6 elongatis, ovato-subfusoideis; sporidiis fusoideis subcurvatis. 4025

Hab. in P o g o n o c h a l c e o, Ambleteuse Pas-de-Calais, Slack et Moidrey Manche (Pasquet) et Gallia litoralis mediterranea (Picard).

62. **Laboulbenia Polystichi** Picard, Bull. Soc. Mycol. 1913, p. 540, tab. XXIX fig. 1. — Pallide flava fere hyalina, apice tantum perithecii obscuriore; perithecio ventricoso basi lato apicem versus sensim attenuato et tubulo latere interno nigro maculato terminato; appendice externa hyalina, recta nunquam ramosa, cum perithecium angulum acutum efformante; appendicibus internis duobus e cellula singula parva orientibus, conformibus e cellulis duobus efformatis; antheridiis subterminalibus, basi inflatis apice recto et partem inflatam subaequante terminatis; sporidiis uniseptatis, utrinque acutis, cellula basali duplo majori quam distali; receptaculo 190 μ longo; perithecio 130 μ longo 70 μ lato, sporidiis 60 μ long., appendice externa 255 μ, internis 75-80 μ; totus fungus e pede ad apicem perithecii 320 μ long. 4026

Hab. ad helitras P o l y s t i c h i c o n n e x i, Tournous Saone-et-Loire, Vendres prope Béziers Herault.

63. **Laboulbenia philippina** Thaxt., Laboulb. on Chrysomel., in Proc. Am. Ac. Arts Sc. 50., 1914, p. 31. 4027

Hab. in elytris et artubus R h e m b o s t o affinis speciei, Manila Philipp. (Banks). — Perith. 85-100 × 28-35; sporidia 50 × 3,5; receptac. 100-225 × 38-42; appendices longiores 210-420; long. total. ad apicem perithec. 150-335 μ.

64. **Laboulbenia Sapromyzae** Thaxt., Proc. Amer. Acad. 1917, p. 717. 4028

Hab. in alis Sapromyzae triseriatae et Sapromyzae sp., Los Amates Guatemala (KELLERMAN). — Sporidia 50 × 4; perith. 85-105 × 18-22; recept. 70-105 × 18-20, ramuli appendicis longiores 90-100 μ; long. tot. ad apicem perith. 175 225 μ.

65. **Laboulbenia Muscariae** Thaxt., Proc. Amer. Acad. 1917, p. 718. 4029

Hab. in alis sinist. Sapromyzae muscariae, Los Amates Guatemala (KELLERMAN). — Sporidia 52 × 4; perith. 90-110 × 16-20; recept. 88-95 × 18; appendix ad apicem rami longioris 105; long. tot. ad apicem perithecii 200-230 μ.

66. **Laboulbenia Siagonae** Picard, Bull. Soc. Mycol. 1913, p. 545, t. XXIX fig. 5. — Receptaculo basi angustiore, rigido, recto, 200 μ longo, cellula subbasali majori; infra flavido supra obscuriori perithecio late fusoideo 170-180 × 70-75, obscure brunneo, infra flavidulo v. subhyalino, apice hyalino sed infra colore nigro-brunneo limitatis; cellulis perithecii spiraliter dispositis; appendicibus e cellulis duobus orientibus, exteriori uni-appendiculata interiori tetra-appendiculata, appendicibus 85-95 μ long. interioribus transverse 2-3 septatis; totus fungus 370-380 μ longo. 4030

Hab. in Siagona (? rufipedi), Algeria.

67. **Laboulbenia Steleoceri** Thaxter, Proc. Amer. Ac. of Sc 53., 1918, p. 708. — Pallide sordideque brunnescenti, perithecio olivaceo-brunneo nigricanti; cellula basali parum curvata v. geniculata, infra hyalina et late rotundata; cellula insertionis utrinque latere libera, parum latiori quam longiori; translucenti olivacea; cellula basali appendicum interiorum parum latiori, duos ramos semel v. bis divisos et ad basim parvum numerum antheridiorum crassorum interpositos gerenti; perithecio subopaco, subconico, convergenti, extus leniter convexo, basi lata apice obtuso abrupte expanso, 50 × 22 infra 7,5 μ apice 9 μ; cellula I 30 × 15, II 70 × 16, III-IV 14 × 8; totus fungus 150 μ circ. long. 4031

Hab. ad alam Steleoceri lepidi [Dipt.], Gambia River Africa occ. — *Ceraiomyces* typus pertinens.

68. **Laboulbenia Picardii** Maire, Bull. Soc. Hist. Nat. Afrique du Nord t. VII, 1916, p. 28, fig. 4. — Maior (500-560 μ alt.); perithecio ovoideo-oblongo, 115-120 × 38-44, dilute melleo, apice in ostiolum concolor basi vix constrictum attenuato. Ascosporis infra $^1/_4$ inferiorem uniseptatis, hyalinis, laevibus, utrinque acutis; receptaculo longissimo, gracillimo, 430-460 long. dilute melleo, verrucoso. Receptaculi cellulis omnibus elongatis, cellula 2. omnium longissima (250-280 × 20-25). Cellulis 4. et 5. perithecio omnino connatis; cel- 4032

lula 5. subtriangulari-elongata; psallio (insertionis cellulæ) atrato, crassiusculo (4-5). Appendicum concolorum cellulis basalibus subæqualibus. Appendice externa valde divaricata, simplici v. ramosa; appendice interna perithecio breviore, ramosa, antheridifera; antheridiis lageniformibus rectis.

Hab. in elytris Tachyis bisulcati Nic., Larache Mauritania, Africa bor. (P. DE PEYERIMHOFF).

69. **Laboulbenia manubriolata** Thaxt., Proc. Amer. Acad. 1915, p. 44. 4033

Hab. in variis partibus insecti Tachyii affinis, Samarang Java, Peradeniya Ceylon. — Perith. 80-135 × 20-26; appendices longiores 150; receptac. ad cellulam insertionis 120-300 × 30-40; long. tot. ad apicem perith. 160-400 µ.

70. **Laboulbenia asperata** Thaxt., Proc. Amer. Acad. 1912, p. 201, Speg. Lab. Arg. fig. 149. 4034

Hab. in elytris Tachyis sp Palermo et Tachyis bonariensis, ins. Santiago, La Plata Argentina (SPEG.). — Perith. 110 × 40; appendix longior 250 µ; receptac. 100-235, long. tot. ad apicem perith. 150-350 µ.

71. **Laboulbenia Veliae** Thaxt., Proc. Amer. Acad. 1912, p. 195. 4035

Hab. in superf. thoracis Veliae platensis, Belgrano pr. Palermo Argent. — Sporidia 50 × 7; perith. 125-130 × 24; recept. 235-260; cellula prima et secunda 200 × 18; appendices, inclusis ramis longioribus, 200; tot. long. ad apicem perithecii 350 µ.

72. **Laboulbenia hemipteralis** Thaxt., Proc. Amer. Acad. 1912, p. 194. 4036

Hab. in artubus et superf. infer. Veliae platensis, Belgrano pr. Palermo Argent. — Perithecia 66 × 20-33; sporidia intra perith. 22 × 2,6; receptac. 85 × 23; appendices ad apices ramulorum longiorum 105 µ; tot. long. ad apicem perith. 100-120 µ.

73. **Laboulbenia porrigens** Thaxter, Proc. Amer. Ac. of Sc. 53., 1918, p. 705. — Cellula basali breviuscula uno latere incurvata, plus v. minus inflata v. distorta; cellula basali receptaculi bene evoluta, obscure olivaceo-brunnea cum cellula basali appendicum externarum concolori; axe appendicum externarum e duobus cellulis efformato, superiori longiori et pallidiori, cellula basali appendicum interiorum minori quam cellula bas. append. externarum; cellula basali perithecii indistincte punctata; peritheciis bas. 95 × 28, sporidiis 35 × 3; appendicibus longioribus 140-157 µ, cellulis III-IV longioribus 40 × 15, brevioribus 25; totus fungus 175-210 µ long. 4037

Hab. in superiori parte abdominis parvae Muscidae familiae ignotae [Dipt.], Kamerun Africa occ. — Proxima *Lab.* (*Ceraiomyces*)

Dahlii, sed appendicibus omnino diversis.

74. **Laboulbenia fasciculata** Peyr. — Syll. XIV p. 731. — * **Omophroni** Speg., Laboulb. ital. I, in Redia p. 32 (1914) tab. 1 fig. 7. — Erostris, polymastiga, macromastiga, apsallia saepius gracilis et tenella diu hyalina, serius leniter et aequaliter fuscescens, cellula quinta quadripartita, paraphysibus subsimplicibus, praelongis, perithecio ad medium fere usque androsticho adnato, ostiolo obliquo, obtuso. — Altit. 300-350 μ; perith. 120-130 × 40; paraph. 200-500 μ longo. 4038

Hab. in Omophrone limbato et O. variegato, in Italia.

75. **Laboulbenia Leathsi** Speg., Laboulb. Argent. in Anal. Mus. Nac. Buenos Aires XXIII (1912) p. 215 fig. 45. — Mediocris, 450 μ circ. alta, ferruginea, apsallia, brachymastiga; peritheciis ellipsoideis, 150 × 60, ad medium usque parte distali adnatis, ostiolo umbonato, exappendiculato, crassiusculo, nigro-torquato, ore subfimbriato; paraphysibus numerosis brevissimis. 4039

Hab. in Gyrino Leathsi in Chile — *L. Guerini* Rob. proxima.

76. **Laboulbenia Oodis** Speg., Laboulb. Argent. in Anal. Mus. Nac. Buenos Aires XXIII (1912) p. 225 fig. 55. — Mediocris, 350-800 μ usque alta, fusco-olivascens, apsallia, brachymastiga; receptaculo normali; perithecio ellipsoideo plus minusve elongato, 150-300 × 60-90, longitrorsum 4-lineato saepeque torto basi breviuscula parte distali adnato, ostiolo brevi, crasso, obtuso, exappendiculato, in juventute striato-pectinato; paraphysibus densis, brevibus, subfluxilibus. 4040

Hab. in Oode (Stenocrepis) laevigato, La Plata, Argentina. — Habitu perithecii *L. decipientis* Thaxt. affinis.

77. **Laboulbenia mesomorpha** Speg., Laboulb. Arg. p. 606 f. 140. — Eulaboulbenia, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, brachymastiga, parva, tota obscure castaneo-subpurpurascens, psallio tenui parum manifesto, cellula I pedicelliformi fere tota hyalina, II subtrapezoidi brevi, V majusculo cum IV supra III insidentibus, perithecio elliptico-ovato sursum attennato, ostiolo rotundato, labiis obtusis hyalinis, vittis duabus longitudinalibus nigris subtortis ornato. 4041

Hab. in elytris Bembidii convergentis, in ins. Santiago, La Plata. — Perith. 80-85 × 40-45, alt. tot. 170-185 μ.

78. **Laboulbenia chirophora** Speg., Lab. Arg. p 604, fig. 138. — Eula- 4042

boulbenia, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, brachymastiga; parva tota hyalina, paraphysopodio incoloro, axi primario brevissimo concolore, andropodio majusculo hyalino cellulas binas sustinente, ramulis quatuor dimeris achrois crassis obtusis coronato.

Hab. in elytris Tachys sp. ind., in ins. Santiago La Plata.— Perith. 65-75 × 35; alt. tot. 175-200 μ.

79. **Laboulbenia paraguayensis** Speg., Lab. Arg. p. 606, fig. 141. — Eulaboulbenia, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, brachymastiga; subparva, obscure fusco-olivacea, cellulis I, II et V pallidioribus, andropodio paraphysopodioque corpus subglobosum inferne nigrum opacum efformantibus, paraphysibus breviusculis fuscis, peritheciis subellipticis grosse nigro-umbonatis, ostiolo pleurogeno, labiis vix pallidioribus, sporis saturate olivascentibus. 4043

Hab. in elytris Calleidae amethystinae, San Pedro, Paraguay. — Perith. 90-110 × 38-43; alt. tot. 200-225 μ.

80. **Laboulbenia asperula** Speg., Laboulb. Argent. in Anal. Mus. Nac. Buenos Aires XXIII p. 197, fig. 25 (1912). — Tota fuscidula, fere opaca, parvula, 120-180 μ alta, melanopsallia, brachymastiga; peritheciis ovoideis, 80 × 40, ad medium fere usque parte distali adnatis, ostiolo cylindraceo, recto, obtuso, exappendiculato; cellulis secunda et tertia receptaculi dense minuteque papillosis. 4044

Hab. in Trecho indeterm., La Plata, Argentina.

81. **Laboulbenia macrocera** Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. Buenos Aires XXVI (1915) p. 474 fig. 19. — Eulaboulbenia, haplocytia, melanopsallia, apodotheca, malacochaeta, macromastiga, ceratotheca, infuscata, elongata, gracilis, 750-800 μ alta; cellula basali brevi, pellucida, praebasali brevissima turbinata opaca; androsticho et gynosticho adnatis, angustis, elongatis; perithecio praelongo, cylindraceo, recto, 400-450 × 45-50, plus minusve manifeste vittis nigris longitudinalibus 4 notato, apice abrupte angusteque umbonato, ostioli obliqui labio ventrali in appendice parum divaricata, recta, gracili, rigida, atra, opaca 100 × 10-15 producto; paraphysibus paucis, ramulosis, rigidulis, fragilibus. 4045

Hab. in Carabide quodam (Miscelus? sp.), in ins. Sumatra (E. Modigliani) — *L. Langsbergi* Speg. proxima sed facile dignoscenda.

82. **Laboulbenia Langsbergi** Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. Buenos Aires XXVI (1915) p. 473 fig. 18. — Haplocytia, psalliophora, podocarpa, melanochaeta, ceratotheca, fusca, majuscula, 4046

400-450 μ alta; receptaculo abbreviato, clavulato; paraphysibus elongatis, simplicibus, nigris, 150-250 μ altis; perithecio modice pedicellato (pedic. 50-60 μ alto), subcylindraceo, sursum leniter attenuato, 200 × 25, apice obtusissime crasseque umbonato, ostiolo truncato, labiis hyalinis, cirrulo gracili divaricato fuscescente ornato.

Hab. in Catascopi sp., in ins. Java (E. Langsberg). — *L. imitantis* Thaxt. proxima.

83. **Laboulbenia Desgodii** Speg., Laboulb. Mus. ital. in Anal. Mus. Nac. 404
Buenos Aires XXVI (1915) p. 470 fig. 15. — Majuscula, 600 μ circ. alta, fusca, parum translucens ceratotheca; cellulis, prima levis leniterque obconoidea, secunda minute denseque papillulosa subcylindracea, pellucidis et elongatis; perithecio subconoideo, 175 × 60, apice rotundato subacutato ostioloque obtuso subhyalino vix bipapillato-appendiculato coronato, subopaco, basi breviter androsticho sursum nigrefacto adnato; paraphysibus numerosis, brevibus, 50 μ altis, subtorulosis.

Hab. in Desgodio distincto, lacu Pangani, Ushambara, Afr. or. (E. Dabbene). — *L. Dineustis* Thaxt. proxima, sed cellula praebasali asperula et appendicibus ostioli brevissimis distincta.

84. **Laboulbenia Dineustis** Thaxt. — Syll. XVI p. 684. — * **astrantica** 404
Speg., Laboulb. Mus. ital. in Anal. Mus. Nac. Buenos Aires XXVI (1915) p. 471 fig. 16. — Majuscula, 550 μ alta, clavulata, ceratotheca, fere tota fusco-opaca, perithecio crasso recto subconoideo, 200-225 × 75-80, receptaculo parum breviore.

Hab. in Dineuste micante, prope Cotonou, Astranti, Afr. occid.* — **neo-guineensis** Speg., l. cit. p. 471 fig. 17. — Major, 800 μ alta, subcylindracea, subpallescens; perithecio dorso leniter curvulo, 200 × 30, quam receptaculum triplo breviore. A typo etiam toto habitu graciliore recedit. *Hab.* in Dineuste pectorali, in flum. Pomamou, Nova Guinea (E. Modigliani).

85. **Laboulbenia borealis** Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. 404
Buenos Aires, XXVI (1915) p. 468 fig. 13. — Eulaboulbenia, haplocytia, melanopsallia, apodotheca, malacochaeta, brachymastiga, ceratotheca, 400-450 μ alta, tota atra opaca; cellula basali non geniculata, gracili, elongata, 105-125 × 20-30, vix pellucida, praebasali brevi, crassa; perithecio ovoideo-elongato, 150-200 × 75-90, atro, ostiolo nigro labio postico subcorniculato, antico abbreviato utrimque appendice parva subcylindracea hyalina ornato.

Hab. in Gyrino boreali, Bezulian, Amer. septentr. — Affinis *L. gyrinidarum* Thaxt. et *L. gyrinicolae* Speg. sed statura,

longitudine cellulae basalis et brevitate praebasalis bene distincta.

86. **Laboulbenia gyrinicola** Speg., Laboulb. ital. I, in Redia X p. 34 (1914) tab. II fig. 12. — Apsallia, brachymastiga, ceratotheca, tota obscure ochracea fere opaca 250-400 μ alta: cellulis prima et secunda subcylindraceis gracilibus, pallidis, pellucidis, ad septum primum eximie geniculatis et saepe leniter inflatis, perithecio conoideo, ad tertium inferum usque androsticho adnato, 100-150 × 50-75, ostiolo obtuso, crasso, hyalino, appendicibus duobus longiusculis curvulis, subtenuibus, 14-16 × 3-4, acutis, concoloribus ornato; paraphysibus 50-75 μ longis. 4050

Hab. in Gyrino natatore, in Italia boreali.— * **stagnalis** Speg., loc. cit., fig. 13.— A typo statura et crassitie conspicue minore satis riteque distincta. Altit. 250-275 μ; perith. 90-100 × 25, append. ostiol. 10 × 3. — *Hab.* in Gyrino concinno, prope Porto Maurizio, et G. elongato prope Conegliano, Ital. bor.

87. **Laboulbenia birmanica** Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. Buenos Aires XXVI (1915) p. 467 fig. 12. — Parvula, 175 μ alta, ceratotheca; cellulis pedicellaribus elongatis, subcylindraceis, septo primo vix incrassatis; androsticho maximo, infuscato, apice truncato, in paraphysopodio permagno producto; gynosticho minimo; perithecio parvulo, 40 × 25, ellipsoideo-conoideo, androsticho dorso longe adnato, apice minute ostiolato; appendicibus pusillis, vix perspicuis. 4051

Hab. in Orechtochilo birmanico, Karim-geçu, Birmania (L. Fea). — Specimina juvenilia tantum visa.

88. **Laboulbenia orechtochilicola** Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. Buenos Aires XXVI (1915) p. 477 fig. 21. — Haplocytia, hyalopsallia, apodotheca, ceratotheca, mediocris, geminata, altera subbacillari, abortiva, sterili, 200-250 μ alta, altera evoluta 300-400 μ alta; cellula basali elongata, leniter obconoidea, tortuosa; praebasali etiam elongatula, e cylindraceo subconoidea; androsticho truncato, nigrescente, paraphysopodio et antheridiopodio hyalinis, paraphysibus paucis concoloribus, basi nigro-annulatis donatis coronato; perithecio brevi, subconoideo, 80-100 × 25-30, apice bidentato, parte dimidia infera androsticho adnato. 4052

Hab. in Orechtochilo Feae, Tenasserim, Birmania India or. (L. Fea).— *L. crassipede* et *L. strangulatae* Thaxt. affinis.

89. **Laboulbenia crassipes** Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. Buenos Aires XXVI (1915) p. 469 fig. 14. — Mediocris, 325-350 μ alta, fusca, gracilis, ceratotheca; cellula basali brevi, crassa, cylin- 4053

dracea, curvula; praebasali elongata, gracilis, recta, utrimque abruptiuscule conoideo-ampliata; androsticho, brevi, apice oblique subtruncato, obsolete fusco-psalliato; paraphysopodio et antheridiopodio primo subhyalinis, serius atris, opacis; paraphysorum paucorum cellulis basilaribus conicis, nigris, opacis; peritheciis fuscis, subconoideis, 75 × 35, apice obtusis, hyalinis, vix bipapillatis.

Hab. in Orechtochilo lucido, Tenasserim, Indiae or. Birmania (L. Fea). — Affinis *L. strangulatae* Thaxt. sed bene distincta.

90. **Laboulbenia valida** Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. 405
Buenos Aires XXVI (1915) p. 478 fig. 22. — Haplocytia, hyalopsallia, apodotheca, ceratotheca, majuscula, subclavulata, 500-550 μ alta, sursum valde infuscata et subopaca, deorsum pallida et pellucida; cellula basali subbrevi conoidea, praebasali cylindrica elongata, sexta sat turgida; perithecio pro ratione parvo, 125 × 50, conoideo-subelliptico, ostiolo vix pellucido, corniculis duobus concoloribus subunciniformibus ornato; androsticho percrasso, truncato; paraphysibus paucis, brevibus, fusculis, grumoso-constipatis.

Hab. in Orechtochilo valido, Selebes (O. Beccari).

91. **Laboulbenia Modiglianii** Speg., Laboulb. Mus. ital., in Anal Mus. 405
Nac. Buenos Aires XXVI (1915) p. 475 fig. 20. — Haplocytia, melanopsallia, apodotheca, ceratotheca, 200-300 μ alta; receptaculo abbreviato, crasso; cellula basali obconica, pallida pellucida, praebasali brevissima infuscata; androsticho superne truncato-rotundato, psallio tenui ornato, paraphysopodio antheridiopodioque maximis, confluentibus, atratis coronato; perithecio subcylindraceo, 100-150 × 25-44, basi androsticho breviter adnato, superne abruptiuscule conoideo-attenuato, in umbone atro, dorso appendice nigra, crassa, incurvata, 30-35 × 7-9 aucto producto; paraphysibus gracilibus, 100 × 4-5, ramulosis, fuscis, facile deciduis.

Hab. in Thyreopteri sp., in ins. Sumatra (E. Modigliani). — *L. fissae* Thaxt. et *L. Langsbergi* Speg. cognata.

92. **Laboulbenia Texana** Speg., Lab. Arg. 1917 p. 572, fig. 112 a (* **calo-** 405
theca, n.). — Eulaboulbenia, metalaboulbenia, pachymastiga melanopsallia, hemisyncarpa, orthotheca, cellulis I et II ad septum primum plus minusve geniculatis hyalinis, ceteris fumosis, perithecio cylindraceo-ellipsoideo superne conico-attenuato lineis 4 longitudinalibus cruciatis notato, ostiolo acutiusculo hyalino hypostomo lato nigro limitato, androsticho tumido subhemisphaerico divaricatulo, psallio lato crassiusculo axibus hyalinis, paraphysario percrasso,

antheridiophoro graciliore brevioreque, 6-7-meris, articulis dorso 1-paraphysatis.

Hab. in thorace Brachyni vicini, ins. Santiago, La Plata.— Perith. 125-135 × 38-40; alt. tot. 400-450.

93. **Laboulbenia Castelnaui** Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. Buenos Aires XXVI (1915) p. 481 fig. 25. — Haplocytia, apodotheca, psalliophora, hemisynandrocarpa, major 700 µ alta, paliformis, erecta, recta, fusca; cellulis basali et praebasali cylindraceis, praelongis, 400-500 × 30-40; androsticho perithecio ad quartum superum usque coronato, cylindraceo-ellipsoideo, 150 × 50, apice umbonato; paraphysopodio et antheridiopodio fasciculatim connatis, vix fumosis; paraphysibus paucis, elongatis, cito caducis. 4057

Hab. in Homalosomate nitidicolli, in Australia occid.

94. **Laboulbenia Dercyli** Thaxt. — Syll. XVI p. 684. — * **Eurysomae** Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. Buenos Aires, XXVI (1915) p. 459 fig. 5. — A typo recedit statura conspicue minore coloreque omnium partium pallidiore, alt. 200-250 µ; perith. 75 × 30. 4058

Hab. in Eurysomate pyroptera, Uruçù, Brasilia (Silvestri) — * **Burmeisteri** Speg., loc. cit. p. 460 fig. 6. — A typo et a varietate praecedente differt elongatione et gracilitate receptaculi perithecioque magis producto et fere a basi libero, nec non colore omnium partium obscuriore, peculiari distincta. Alt. 400-500 µ; perith. 150 × 40-50. — *Hab.* in Eurysomate Burmeisteri, Corumbà, Brasilia (Silvestri).

95. **Laboulbenia pachystoma** Speg., Lab. Arg. p. 587, fig. 124, *L. Guerinii* Speg., Contr. Lab. Arg. n. 38, fig. 44 (non Thaxt.) — Eulaboulbenia, hyalopsallia, hemisyncarpa, subrufescenti-olivacea, cellulis I et II pedicelliformibus pallidis ad septum 1. incrassatis obscurioribusque cellulis ceteris receptaculi incospicuis; perithecio puncto majusculo nigro excentrice ornato, deorsum androsticho adnato, sursum leniter attenuato, apice truncato-subrotundato, ostioli vix hyantis labiis subhyalinis, hypostomo nigrescente; psallio plane nullo, paraphysibus numerosis brevibus crassis inferne olivaceis laxe pauceque subnigro-annulatis; androstichi gynostichi atque perithecii parte infera obsolete transverse ruguloso-granulosa. 4059

Hab. in elytrorum margine Gyrinidei sp. indet., Misiones.— Perith. 65-95 × 30-55; alt. tot. 180-250.

96. **Laboulbenia brachynicola** Speg., Lab. Arg. p. 582, fig. 117. — Eulaboulbenia, hyalopsallia, tota mellea et tumida, brevis, crassa, pa- 4060

rietibus omnibus incrassatis, perithecio fere ad basim usque libero ellipsoideo saepe lineis dextrorsis ornato modice crasseque fusco-umbonato, ostioli vix hiantis labiis subinaequalibus rotundatis, paraphysopodio stramineo quam andropodio concolore duplo majore, paraphysibus plus minusve numerosis subbrevibus saepius valide deorsum incurvatis.

Hab. in elytris Brachyni immarginati, La Plata. — Perith. 135-160 × 90-100 ; alt. tot. 250-350.

97. **Laboulbenia leptopus** Speg., Laboulb. Arg. p. 586 fig. 122. — *L. rotundata* Speg., Contr. Lab. Arg. n. 58 f. 64 (non Thaxt.). — Eulaboulbenia, hyalopsallia, parva, subrufescenti-olivacea, cellula basali cylindracea elongata subhyalina, praebasali subpentagona brevi olivascente, III, IV et VI normalibus, VII plane deficiente, V semilunari obliqua, androsticho perithecii dorso adnato, perithecio ovato, crasso, superne attenuato-conico obtuso, ostiolo labiis hiantibus rotundatis hyalinis, hypostomo nigro ; psallio atrophico indefinito nigrescente, paraphysibus numerosis brevibus inferne subtorulosis olivascentibus superne filiformibus hyalinis. 4061

Hab. in elytris Gyrinidei sp. ind., Misiones. — Perith. 75-90 × 30-35 ; alt. tot. 175-200.

98. **Laboulbenia Dysonichae** Speg.; l. cit., fig. 16 (Laboulbeniella). — Fusca, melanopsallia, oligomastiga, 150-200 μ alta ; peritheciis elliptico-subcylindraceis, 75-100 × 25-28, ostiolo bilabiato plus minusve nigrefacto. 4062

Hab. in Dysonicha conjuncta et D. bicarinata, La Plata, Argentina.

99. **Laboulbenia tucumanensis** Speg., Laboulb. Argent. in Anal. Mus. Nac. Buenos Aires XXIII p. 190 (1912) fig. 17 (Laboulbeniella.) — Fusca, melanopsallia, oligomastiga, 180-210 μ alta ; peritheciis late ellipsoideis, 120 × 60, ostiolo bilobo, nigro-annulato. 4063

Hab. in Dysonicha copulata, Tucuman, Amer. austr.—A *L. Dysonichae* Speg. cui affinis, differt praecipue ob perithecia crassiora.

100. **Laboulbenia Homophoëtae** Speg., Laboulb. Argent. in Anal. Mus. Nac. Buenos Aires XXIII p. 191 (1912) fig. 18 (Laboulbeniella) — Fusca, melanopsallia, melanomastiga, 200-250 μ alta; cellula receptaculi basali elongata, caeteris valde abbreviatis ; peritheciis subfusoideis, atris, 90-120 × 30-35, non vel vix bilabiatis, longitrorsum bilineatis; paraphysibus ramosis, divaricatis, fuscis, ramulo interno ascillari biantheridiato. 4064

Hab. in Homophoëta 8-guttata, Minas Geraes in Bra-

silia. — Species pulcherrima eximie distincta.

101. **Laboulbenia endogaea** Picard, Bull. Scient. France Belgique t. 50., 1916-1917, p. 455, pl. VI fig. 6 (an 5 ?). — (Laboulbeniella). Brunneo-olivacea, basi receptaculi et appendicibus hyalinis; perithecio subcylindraceo, 50-55 µ longo, apicem versus contracto; ostiolo apicali; receptaculo recto e basi ad apicem sensim incrassato; cellula 3. 4. et 5. cellulam unicam parvam subconoideam efformantibus; appendice interna fertili, certe decidua, non visa; externa unica non ramosa, perithecio duplo longiore, hyalina; cellulis appendicum ad septa contractulis omnibus apicem versus sensim majoribus inflatis; appendice 75-100 µ longa. Totus fungus 130-135 µ longo. 4065

Hab. in Reicheia usslaubi var. sardoa (Carabidae), Sardinia Italia (Ch. Fagnier).

102. **Laboulbenia Bergii** Speg., Lab. Arg. p. 565, fig. 102. — Zigolaboulbenia, haplocytia, laboulbeniella, ceratotheca tota plus minusve fumoso-subtestacea, cellula basali obconica, praebasali elliptico-subglobosa, androsticho et gynosticho irregularibus 1-, rarius 2-, meris, perithecio elongato ellipsoideo, saepius obscuriore, lineis verticalibus plus minusve distinctis notato, apice breviter umbonato, umbone truncato-ostiolato, labio ventrali lineari-spathulato recto erectoque ornato; psallio angusto nigro, paraphysibus paucis subtenuibus deorsum nodulosis nigrescentibus saepius subcircinatis donato. 4066

Hab. in abdominis margine Dysonichae conjunctae, Buenos Aires (C. Berg). — Perith. tot. 110-125 × 30-35; alt. tot. 200-350 µ.

103. **Laboulbenia Systenae** Speg., Lab. Argent. p. 568, fig. 107. — Zigolaboulbenia, haplocytia, laboulbeniella, apsallia, tota plus minusve olivascens, paraphysopodio nigro opaco, paraphysum parte infera olivacea dorso nigro-marginata parte supera subhyalina, peritheciis omnino liberis cylindraceo-ellipticis, lineis 4 nigris tenuibus dextrorsis percursis, apice abrupte contracto-umbonatis, hypostomo nigro, labiis ostiolaribus prominulis hyalinis. 4067

Hab. in elytris Systenae testaceo-vittatae, Sta Catalina B. A., Argent. — Perith. 80-85 × 30-32.

104. **Laboulbenia palustris** Speg., Lab. Arg. p. 562, fig. 100. — Zigolaboulbenia, haplocytia, laboulbeniopsis, melanopsalia, apodotheca, malacochaeta, brachymastiga, parva, perithecio cum receptaculo breviato angulum rectum efficiente, ovato, pallido ad ventrem fuscorufescente, umbone crasso brevi obtuso nigro, ostioli labiis hyali- 4068

nis coronato; androsticho majusculo tumidulo, andropodio et paraphysopodio subglobosis saepe subfumosis, cellulas 1 v. 2 basilares axium nigriseptatas ferentibus, paraphysibus paucis crassiusculis oligomeris hyalinis.

Hab. in thorace Carabidi sp. pusillae (Tachys corruscans?), La Plata. — Perith. 75-80 × 45-50; alt. tot. 100-125 μ.

105. **Laboulbenia unicornis** Speg., Lab. Arg. p. 563, fig. 101. — Zigolaboulbenia, haplocytia, laboulbeniopsis, tota chlorina, cellula basali subhyalina obconica, praebasali longiore crassioreque, tertia quarta quintaque androstichum subglobosum efficientibus, sexta quadrangulari subnormali, septima plane deficiente; psallio angusto stricto atro-olivaceo pellucido; paraphysopodio atque andropodio parvis versiformibus, paraphysibus saepius ternis dorso arcuato deflexis, antheridio unico solitario ad articulum secundum antheridialem; perithecio irregulariter lageniformi, parte sporifera subgloboso-inflata, superne abrupte contracto in umbone conico crasso, ostiolo laterali, labio ventrali supero obtuse rotundato, infero in cornu obliquo dorsali producto. 4069

Hab. in thorace Anthocomi sp., Sta Catalina B. A., Argent. — Perith. 65-75 × 40-45; alt. tot. 140-175.

106. **Laboulbenia Agrae** Speg., Laboulb. Arg. p. 597, fig. 128. — Eulaboulbenia, melanopsallia, apodotheca, eleutherocarpa, malacochaeta, macromastiga, majuscula, obscure olivacea, dorso androstichi perithecioque parte media atro-olivaceis, margine cellularum inferiorum paraphysum hypostomoque nigris opacis, perithecio ab ima basi libero, elliptico umbone crasso brevi subtruncato, labiis ostioli parvi vix hyalinis coronato, lineis 4 longitudinalibus dextrorsis crassiusculis nigris notato. 4070

Hab. in elytris Agrae sp. indeterm., Iguazù Misiones, Argent. — Perith. 150-180 × 65-70; alt. tot. 300-400 μ.

107. **Laboulbenia heroica** Speg., Laboulb. ital. I, in Redia X p. 60 (1914) tab. VIII fig. 56. — Eulaboulbenia, haplocytia, melanopsallia, apodotheca, malacochaeta, macromastiga, mediocris, 150-275 μ alta, inferne pallida superne infuscata, septis tertio et septimo remotis; perithecio atro, 75-100 × 35-45, androsticho ad medium fere usque connato, ostiolo sat umbonato, obtuso, vix obliquato, non vel vix centro hyalino; paraphysopodio et andropodio majusculis, atratis; paraphysibus 250 μ circ. altis. 4071

Hab. in Anisodactylo heroe in Sardinia. — Affinis videtur *L. melanariae* Thaxt. et *L. ancipiti* Peyr.

108. **Laboulbenia subopaca** Speg., Lab. Arg. p. 657, fig. 183. — Eulaboulbenia, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, macromastiga, subopace rufo-fuliginea, cellula basali subhyalina cylindraceo-turbinata, praebasali obscuriore vix longiore, androsticho gynostichoque normalibus subopacis, perithecio cylindraceo-ellipsoideo lineis nigris tenuibus 4 longitudinalibus dextrorsis ornato superne attenuato-rotundato grosseque umbonato, hypostomo nigro, ostiolo pallidiore rotundato, andropodio, paraphysopodio nec non cellulis duabus v. tribus inferis axium torulosis nigris, paraphysibus tenuibus brevibus fuscis. 4072

Hab. in eytris Perenoscelis undati, Misiones Argent. — Perith. 85-115 × 36-40; alt. tot. 190-215 μ.

109. **Laboulbenia hyalopus** Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. Buenos Aires XXVI (1915) p. 503, fig. 44. — Eulaboulbenia, haplocytia, melanopsallia, apodotheca, malacochaeta, polymastiga, macromastiga, minuta, 200 μ alta, ad maturitatem tota atra opaca; cellula basali excepta semper hyalina; androsticho superne obliqne truncato psallio constricto; paraphysopodio antheridiopodioque majusculis, nec non articulis inferis paraphysarum plus minusve nigrefactis; perithecio ellipsoideo-conoideo, 100 × 40, opaco, breviter deorsum androsticho adnato, umbone crasso subbrevi obtusoque, ostiolo subdorsali, labiis vix pallescentibus; paraphysibus filiformibus 150 × 5-10. 4073

Hab. in Brachyno equestri, Arr-amba, Scioa (Antinori). — A caeteris speciebus brachynicolis perfecte distincta.

110. **Laboulbenia pachydermica** Speg., Lab. Arg. p. 656, fig. 182. — Eulaboulbenia, melanopsallia, apodotheca hemisyncarpa, malacochaeta, macromastiga majuscula, tota tumida, subhyalina, plagulis perithecii olivascentibus suffusis, parietibus totius corporis pererassis, paraphysopodio quam andropodio duplo majore, paraphysibus parum numerosis elongatis crassis dorsalibus leniter olivascentibus. 4074

Hab. in elytris Feroniae lucidae, Santiago Chile. — Perith. 85-100 × 55-60; alt. tot. 250-300 μ.

111. **Laboulbenia montevidensis** Speg., Laboulb. Arg. p. 653 fig. 180, *L. Brachyni* fm. *elongata* Thaxt., *L. Rougeti* Speg., Contr. Lab. Arg. n. 59 f. 65 (non Mont. et Rob.). — Eulaboulbenia, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, macromastiga, tota mellea, erecta, robusta, receptaculo rugulis transversis saepe notato, perithecio ellipsoideo-cylindraceo recto saepe lineis 4 longitudinalibus dextrorsis ornato, paraphysopodio andropodio atque paraphy- 4075

sibus a basi liberis totis pallidis.

Hab. frequens in Brachyno nigro, Br. vicino, Montevideo, in Brachyno vicino, Br. nigripede, Sta Catalina B. A. et La Plata. — Perith. 150-175 × 50 55; alt. tot. 350-500 μ.

112. **Laboulbenia Aspidoglossae** Thaxt.— Syll. XIV p. 730.— *** L. mattogrossensis** Speg., Lab. Arg. p. 646, fig. 173 b. – Eulaboulbenia melanopsallia, apodotheca, hemisyncarpa, malacochaeta, macromastiga; septo 1., androsticho gynostichoque fumosis, perithecio infuscato sed pellucido, andropodio ac paraphysopodio parum distinctis, cellulis basilaribus axium submajusculis globosis septis nigris limitatis, paraphysibus numerosis filiformibus tenuibus. 4076

Hab. in elytris Aspidoglossae crenatae, Mattogrosso Brasiliae et La Plata. — Perith. 110-125 × 40-45; alt. tot. 375-425 μ.

113. **Laboulbenia fuscula** Speg., Laboulb. Arg. p. 651, fig. 178. — Eulaboulbenia, melanopsallia apodotheca, hemisyncarpa, malacochaeta, macromastiga, mediocris, recta v. deorsum leniter arcuata, obscure fusco olivacea, cellulis II, III, IV et VI saturatioribus minute nigro-punctatis, apice dorsali cellulae IV sat producto, perithecio, quarto infero androsticho adnato, e cylindraceo fusoideo modice obtuseque umbonato, hypostomo dorso nigrefacto ventre pallido, paraphysopodio tumidulo fumoso quam andropodio duplo majore, axi paraphysum primario margine dorsali nigro, paraphysibus tenuibus subhyalinis antrorsum arcuatis, per aetatem fragilibus caducis. 4077

Hab. in elytris Argutoridii uruguayci, Montevideo— Perith. 90-100 × 28-30; alt. tot. 235-250 μ.

114. **Laboulbenia afra** Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. Buenos Aires XXVI (1915) p. 499 fig. 41.— Eulaboulbenia, haplocytia, melanopsallia, apodotheca, malacochaeta, polymastiga, macromastiga, saepius valde infuscata, 300-350 μ alta; perithecio ovato-elongato, recto, 125 × 50, fere ad basim usque libero, sensim crasseque attenuato-umbonato, ostiolo obtuse rotundato vix obliquo, labiis decoloratis; androsticho gynosticho omnino adnato, superne obliquo, psallio majusculo crasso coronato; paraphysopodio toto nigrificato dense flabellato-ramoso, antheridiopodio concolore; paraphysibus densis, erectis, rigidulis, infuscatis, 150-175 μ altis; antheridiis majusculis pluribus; cellula basali dimidia infera pallescente, ceterum atra ut praebasali. 4078

Hab. in Brachyno 4-punctato, Bolama, Guinea lu-

sitanica (L. Fea). — A *L. bolamensi* Spég. et *L. hyalopode* Speg., cui subaffinis, habitu facile distinguenda.

115. **Laboulbenia bolamensis** Speg., Laboulb. Mus. ital., in Anal. Mus. 4079
Nac. Buenos Aires XXVI (1915) p. 501 fig. 43. — Eulaboulbenia, haplocytia, melanopsallia, apodotheca, malacochaeta; polymastiga, macromastiga, grandiuscula, 400-500 μ alta, modice infuscata; perithecio subcylindraceo, 150-175 × 50-55, usque ad basim fere libero, apice subabrupte crasseque conico-umbonato, ostiolo recto subtruncato-rotundato, labiis decoloratis, parietibus lineis 4 longitudinalibus clathratis ornatis; androsticho gynosticho omnino adnato, superne obliquo, psallio majusculo crasso coronato; paraphysopodio dorso plus minusve nigrifacto; antheridiopodio etiam sursum atrato; paraphysibus numerosis, fasciculatis, perithecium vix superantibus, 100-150 μ longis, plus minusve infuscatis; cellula praebasali semper brevi et tota vel magna pro parte nigra, basali autem plus minusve elongata sed saepius brevi et pallida.

Hab. in Brachyni sp. ind. (aff. B. equestri), Bolama, Guinea lusitan. (L. Fea). — *L. afrae* Speg. affinis sed bene distincta.

116. **Laboulbenia rigidula** Speg., Laboulb. Arg. p. 600 fig. 132. — Eu- 4080
laboulbenia, melanopsallia, apodotheca, eleutherocarpa, tota e fuscoolivascente nigrescens, mediocris, elongata, angusta, vix arcuata, rigidula, cellulis III et IV parallelis subaequilongis, IV plus minusve nigrescente dorso prominulo-subgibbosa, V majuscula apicem internum tertiae attingente, septima parva saepius subatrophica, perithecio ad basim usque libero subfusoideo atro, per aetatem subopaco sursum in umbone ostiolari hyalino, hypostomo nigro, obtuso producto, cellulis inferis paraphysum majusculis subtorulosis plus minusve infuscato-nigrescentibus, paraphysibus fumosis.

Hab. in elytris Zygogrammae aureilineae, Misiones Argent. (C. Berg). — Perith. 99-100 × 28-30; alt. tot. 250-275 μ.

117. **Laboulbenia Rougeti** Robin — Syll. VIII p. 910 — ***L. Callisti** Speg. 4081
Laboulb. ital. I, in Redia X p. 64 (1914) tab. IX fig. 60, et in Anal. Mus. Nac. Buenos Aires, XXVI (1915) p. 497. — Macromastiga. Statura conspicue minore, gracilitate omnium partium, receptaculo elongato, ostiolo crassissimo obtusoque, axi paraphysario primario toto nigrificato a typo recedit. Alt. 225-275 μ, perith. 75-85 × 25-35, paraph. 200-250 μ long.

Hab. in Callisto lunulato nec non in Platyno dorsali in Italia, et in Europhilo dorsali ex Morea.

— * **L. chlaeniicola** Speg., l. cit. p. 65, tab. IX fig. 61.— Differt receptaculo elongato perithecio duplo triplove longiore, paraphysopodio e cellulis basalibus axeos primarii non vel vix nigrifactis. Alt. 400-500 μ, perith. 100 × 50, paraph. 300-350 μ alt. 4082

Hab. in Chlaenio nitidulo, prope Romam, Ital. centr.

— * **L. fuscescens** Speg., l. cit. p. 65, tab. IX fig. 62.— Statura minore, colore saturatiore castaneo-atro et perithecio magis libero distincta. Alt. 200-225 μ; perith. 110 × 50, paraph. 100-150 μ alt. 4083

Hab. in Agono Mülleri, prope Romam Ital. centr.

— * **L. sicula** Speg., Laboulb. ital. II, in Anal. Mus. Nac. Buenos Aires, XXVII p. 61 fig. 26. — Erecta, 350-400 μ alta; receptaculo pallido, pellucido, conoideo; androsticho atque gynosticho normalibus, connatis, inferne subpurpureo-fuscis, superne atris opacis; perithecio cylindraceo-conoideo, 150-175 × 65-70, grosse umbonato, oblique truncato-ostiolato, nigro; paraphysopodio et axi paraphysario primario infuscato, antheridiopodio ac ejusdem paraphysibus subhyalinis. 4084

Hab. in Brachyno bellicoso, Trapani, Sicilia et prope Tunisi, Afr. bor.

118. **Laboulbenia Bolamae** Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. Buenos Aires XXVI (1913) p. 500 fig. 42. — Eulaboulbenia, haplocytia, melanopsallia, apodotheca, malacochaeta, macromastiga, fusco-mellea, mediocris, 250-300 μ alta; cellula quarta seu supera androstichi superne eximie truncata, angulo dorsali recto acuto prominulo; perithecio pro ratione majusculo, subcylindraceo, 100 × 30, grosse umbonato-ostiolato, hypostomo atro, ostiolo obliquo, labiis subhyalinis, appendice trichogynica persistente longiuscula; paraphysibus filiformibus sat copiosis, 250-350 μ longis. 4085

Hab. in Feronideo majusculo brunneo indet., Bolama, Guinea lusitan. (L. Fea). — Ad typum *L. flagellatae* Peyr. pluribus characteribus vergit sed androsticho eximie truncato etc. distincta.

119. **Laboulbenia Peiroleri** Speg., Laboulb. ital. I, in Redia X p. 61 (1914) tab. VIII fig. 57. — Eulaboulbenia, haplocytia, melanopsallia, apodotheca, malacochaeta, manomastiga, macromastiga, mediocris, 325-350 μ alta, fusca, receptaculo modice conico, pallido; perithecio atro opaco, 150-175 × 60-70, deorsum breviter androsticho adnato, apice ostiolo obtusissimo crassissimo leniter obliquo donato; paraphysibus paucis, flaccidis, subcrassiusculis, 300-350 μ longis, e basi sursum leniter sensim incrassatis, apice obtuse rotundatis atque plus minusve arcuatis, rufescentibus. 4086

Hab. in Platyno (Anchomeno) Peiroleri, Val

Pesio, Pedem. Ital. bor.— * **L. helvetica** Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. Buenos Aires XXVI (1915) p. 496 fig. 38. — Statura duplo majore, oligomastiga, 400-500 μ, paraphysibusque minus incrassatis et minus flaccidis a typo recedit. — Perith. 200 × 70; paraph. 400-600 × 25.—*Hab.* in Anchomeno depresso, ex alpibus Helvetiae.

120. **Laboulbenia philonticola** Speg., Laboulb. ital. I, in Redia X p. 61 (1914) tab. VIII fig. 58. — Eulaboulbenia, haplocytia, melanopsallia, apodotheca, malacochaeta, macromastiga, androsticho basi perithecii breviter adnato, paraphysopodio et andropodio mediocribus, subglobosis, ostiolo perithecii parum prominulo, obliquo, subbilabiato, paraphysibus dense breviterque ramosis, externo plus minusve infuscato, cellula praebasali perexassa tumida. Alt. 300-375 μ, perith. 100 × 50, paraph. major. 100-150 μ altis. 4087

Hab. in Philontho sp., Levico, Trentino. — Affinis *L. Rougeti* Rob. sed colore saturatiore aliisque characteribus distincta.

121. **Laboulbenia Stenolophi** Speg., Laboulb. ital. I, in Redia X p. 65 (1914) tab. IX fig. 6β, et in Anal. Mus. Nac. Buenos Aires XXVI (1915) p. 505, XXVII (1915) p. 61. — Eulaboulbenia, haplocytia, melanopsallia, apodotheca, malacochaeta, macromastiga, tota melleo-subhyalina, brevis, crassa, 275-350 μ alta, perithecio 100-125 × 60, ostiolo umbonato obliquo, hypostomo nigro, paraphysopodio crasso globoso; paraphysibus crassis, fumosis, majoribus 400 μ usque longis. 4088

Hab. in Stenolopho teutono, prope Coneglanum, Venet., prope Bononiam Ital. bor., nec non prope Bagnères, Gallia.— Affinis *L. Giardi* Cép. et Pic. et *L. polyphagae* Thaxt.

122. **Laboulbenia obesula** Speg., Laboulb. Arg. p. 655 fig. 181, *L. olivacea* Speg., Contr. Lab. Arg. n. 48 fig. 54 (non Thaxt.). — Eulaboulbenia, melanopsallia, apodotheca, hemisyncarpa malacochaeta, macromastiga, tota olivacea, hinc inde irregulariter obscurior saepeque opaca, partibus omnibus ad maturitatem plus minusve tumidulis, peritheciis ad medium fere usque androsticho adnatis cellula 4. dorso sub psallio conspicue angulato-gibbosula, andropodio pallido parvo, paraphysopodio nec non cellulis una v. duabus basilaribus axeos majusculis subglobosis pallidis, paraphysibus crassiuscule filiformibus quandoque pallidis quandoque fusco-olivaceis. 4089

Hab. in elytris Carabinei sp. (Lebiae?), Tucuman Argent. — Perith. 100-150 × 50-70; alt. tot. 300-500 μ.

123. **Laboulbenia vulgaris** Peyr. — Syll. VIII p. 912 — * **L. oncogona** Speg., 4090

Laboulb. ital. I, in Redia X p. 43 (1914) tab. III fig. 27.— Monomastiga. A typo recedit cellulis basali et praebasali, medio eximie coarctata, subaequilongis, septo primo valde tumefacto fumosoque, ceteris normalibus sed (quinta praecipue) infuscatis, perithecio ad medium fere usque androsticho adnato, deorsum fuscescente subopaco sursum pallidiore, attenuato ac in umbone bene evoluto, crasso, oblique ostiolato producto; andropodio septo nigro crasso coronato. — Alt. 220-250 μ; perith. 75 × 32; paraph. 150 μ alta.

Hab. in Bembidio quadriguttato, prope Romam, Ital. centr. — Affinis *L. subterraneae* Thaxt. et *L. pedicellatae* Thaxt.

— * **L. scelisca** Speg., l. cit. p. 44 tab. IV fig. 28. — A typo recedit brevitate et crassitudine corporis, cellulis basali et praebasali pallidis, ceteris atris opacis, perithecio late elliptico, medium fere usque androsticho adnato, subnigro, opaco, umbone non vel vix pallidiore et pellucido coronato, paraphyse solitaria simplici, articulis cuboideis vel subglobosis efformata, antheridiophoro unicellulari. — Alt. 150-170 μ; perith. 75 × 35. 4091

Hab. in Bembidii sp. plur., in Italia.

— * **L. trechiphila** Speg., l. cit. p. 45, tab. IV fig. 29.—A typo distinguitur cellula praebasali superne sub tertia nonnihil producta, androsticho perithecio longiuscule adnato, partibus omnibus pallidis, melleis vel fumosis. — Alt. 185-200 μ; perith. 80 × 35. 4092

Hab. in Trecho binotato, prope Florentiam Ital. centr.

— * **L. communis** Speg., Laboulb. ital. II, in Anal. Mus. Nac. Buenos Aires XXVII (1915) p. 63 fig. 28. — Eulaboulbenia, monomastiga. A typo recedit stipite cylindraceo, ad septum primum vix constricto, non infuscato, cellulis caeteris receptaculi leniter obsoleteque transverse rugulosis et praecipue paraphyse percrasso, vix apice breviter parceque appendiculato. 4093

Hab. in Bembidii sp. indet., prope Genuam, Ital. bor.

— * **L. subcommunis** Speg., loc. cit. p. 63. — A *L. communi* recedit cellula basali parva hyalina, praebasali majuscula turbinata, ramis apicalibus paraphyseos monomeris percrassis, colore obscuriore, subnigro. 4094

Hab. in Bembidii sp. ind., prope Genuam, Ital. bor.

— * **L. subvulgaris** Speg., l. cit. p. 64 fig. 29. — A typo recedit praecipue paraphysopodio maximo, elliptico-subgloboso, 30 × 20-25, medio saepius leniter coarctatulo, paraphyse fere nullo, ad cellulam tantum reducto. 4095

Hab. in Bembidii sp., prope Coneglanum, Ven., It. bor. — An species distincta?

— * **L. trivialis** Speg., l. cit. p. 64 fig. 30. — A typo recedit pedicello medio valide tumefacto, cellula praebasali nec non illis androstichi et gynostichi eximie transverse nigro-maculatis, paraphysopodio mediocri subgloboso in paraphyse brevissimo parce crasseque ramoso producto. 4096

Hab. in Bembidii sp., prope Imola, Ital. bor.

— * **L. suboncogona** Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. Buenos Aires XXVI (1925) p. 489 fig. 32. — A *L. oncogona* Speg. recedit articulatione septi primi minus turgida et praecipue constrictione ejusdem deficentia, perithecioque breviori, longius androsticho adnato. Alt. 250-275 μ; perith. 90 × 35. 4097

Hab. in Bembidio laevigato, Columbus, Texas, America bor.

124. **Laboulbenia polyphaga** Thaxt.— Syll. XIV p. 734. — * **L. phaeosoma** Speg., Laboulb. Arg. p. 616, fig. 147 b. — Eulaboulbenia, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, monomastiga, cellula I subhyalina, III pallide fumoso-testacea, gynosticho androstichoque obscure testaceo-fuligineis laxe v. plus minusve dense asperulo-punctulatis, perithecio atro testaceo laevi subopaco saepius dorso sub hypostomo pallidiore, paraphyse crassa elongata hyalina. 4098

Hab. in toto corpore Carabidorum quorumdam (Argutor, Argutoridius, Pterostichus etc.), Montevideo, Sta Catalina B. A., La Plata. — Perith. 80-90 × 32-35; recept. 115-125 × 40-45; alt. tot. 200-210 μ. — * **L. calathicola** Speg., Laboulb. ital. I, Redia X p. 39 (1914) tab. III, fig. 20.— Monomastiga. A typo recedit colore infuscato, praecipue ad perithecium, umbone ostiolari dorso minus tumido, hypostomo toto nigro, ostiolo valde obliquo. Altit. 175-250 μ; perith. 85-110 × 30-50; paraph. 200-250 μ alta. — *L. vulgari* proxima.

Hab. in Calatho micropterо, prope Romam, C. melanocephali et C. fuscipede, in Veneto.

125. **Laboulbenia Bergiana** Speg., Laboulb. Arg. p. 609, fig. 143. — Eulaboulbenia, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, monomastiga; tota pallidissime mellea, psallio hypostomoque nigris exceptis; cellula VII receptaculi trigonosegmentiformi parva; cellulis IV et V tumidis a perithecio elliptico-ovato, longitudinaliter 4-vittato inclinato, obsolete umbonato-ostiolato divergentibus; paraphyse subhyalina solitaria praelonga deorsum subtorulosa, an- 4099

diopodio minuto monoantheridiato.

Hab. in toto corpore Phinophili Bergi, La Plata. — Perith. 125-40 ≈ 60-65; recept. 200-230 ≈ 65-75; alt. tot. 300-325.

126. **Laboulbenia cymindicola** Speg., Laboulb. ital. I, in Redia X p. 37 (1914) tab. III fig. 17. — Eulaboulbenia, haplogyna, melanopsallia, apodotheca, malacochaeta, monomastiga, 225-250 μ alta, corpore fusco-rubiginoso, protoplasmate grumoso-granuloso, cellulis basali et praebasali elongatis, subcylindraceis, pallidis; ... brevissimo intruso; perithecio turgidulo, subnigrescente, 100-110 ≈ 45-50, crasse breviterque umbonato, ostiolo valde obliquo, hypostomo atro, labiis subhyalinis; paraphyse solitaria, simplici, crassiuscula, 150-175 μ alta; ramulis antheridiiferis numerosis, abbreviatis, gracilibus, penicillatim constipatis. 4190

Hab. in Cyminde coadunata, prope Romam It. centr. — Inter. *L. polyphaga* Thaxt. et *L. Rougetii* Rob. media.

127. **Laboulbenia lathropinicola** Speg., Lab. Arg. p. 613, fig. 145. — Eulaboulbenia, melanopsallia, apodotheca, hemisynocarpa, malacochaeta, monomastiga; tota olivacea, cellulis I et II subaequilongis pallidioribus, ... apice fuscescente breviter libero ... perithecii basi adnato, paraphyse solitaria crassiuscula longiusculaque subhyalina, antheridiopodio brevi simplice biantheridiato, perithecio inclinato superne longe nigro-umbonato, ostioli labiis ... rotundatis modice hiantibus. 4191

Hab. in elytris Lathropini majoris, Santa Fe Arg. — Perith. 125-130 ≈ 50-55, alt. tot. 290-310.

128. **Laboulbenia pulchella** Speg., Laboulben. ital I, in Redia X p. 39 (1914) tab. III fig. 21 et in Anal. Mus. Nac. Buenos Aires XXVI (1915) p. 488. — Eulaboulbenia, haplogyna, melanopsallia, apodotheca, malacochaeta, monomastiga, parvula, 125-150 μ alta, fuscescens, abbreviata, latiuscula, obscura; cellulis secunda, tertia et quarta secus marginem dorsalem plus minusve infuscatis; perithecio breviter ellipsoideo-conico, 60-65 ≈ 30-35, subopaco, ostiolo bene evoluto, obliquo, labio supero nigricante, ... axi primario simplice, elongato, crassiusculo, articulato, 75-100 μ long., vix fumoso, axi antheridiophoro brevissimo, dense breviterque penicillatim ramosulo. 4192

Hab. in Dromio lineari prope Neapolim, It. merid. nec non in Dromio sigma et D. quadrinotato, in Germania. — *L. major Speg., loc. cit. p. 40, tab. III fig. 22. — A typo differt magnitudine omnium partium majore alt. 160-175 μ, perith.

75 ≈ 40, paraph. 125 μ alta, et colore magis infuscato.

Hab. in Metableto (Blechro) foveolato in Tyrolia.

129. **Laboulbenia Blanchardi** C. Picard, Archiv. de Parasitologie t. 16, 1913, p. 373, tab. VI (diagn. nulla). 4103

Hab. in Carabide Demetrias unipunctata, prope Wimereux, Pas-de-Calais, Gallia. — *Lab. Casnoniae* Thaxt. proxima. — Sec. Picard (Bull. Scient. France Belgique t. 50, 1916-1917, p. 453) eadem est ac *Lab. pulchella* Speg.

130. **Laboulbenia gracilis** Speg., Laboulb. ital. II, in Anal. Mus. Nac. Buenos Aires XXVII (1915) p. 54, fig. 21. — Eulaboulbenia, haplocytia, melanopsallia, apodotheca, malacochaeta, monomastiga, mediocris, elongata, 250-500 μ alta, recta; cellula basali abbreviata, obconico-cylindracea, 30-60 ≈ 15, praebasali longissima, 150-300 ≈ 20, plus minusve infra medium angustata sed saepe leniter tumidula; androsticho normali superne infuscato; pedicello parvo nigro; paraphysopodio nec non antheridiopodio pro ratione parvis, paraphyse brevi simplici praeditis; gynosticho normali; perithecio atro, subopaco, elongato, 80-100 ≈ 20-25, gracili, rectiusculo, a quarto inferiore sursum modice attenuato, ostiolo crasso, obtuso, oblique subtruncato coronato. 4104

Hab. in Sunii sp. indet., prope Coneglianum, Ven., Ital. bor.— *L. Philonthi* proxima sed bene distincta.

131. **Laboulbenia planeticola** Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. Buenos Aires XXVI (1915) p. 487, fig. 30. — Eulaboulbenia, haplocytia, melanopsallia, apodotheca, malacochaeta, monomastiga, subparva, 210-220 μ alta, atrata; cellulis basali et praebasali subaequilongis, gracilibus, pallidis pellucidisque; perithecio crasso, subovato, 75-85 ≈ 35-40, grosse et oblique umbonato-ostiolato; androsticho brevissime adnato; paraphyse primario praelongo, 250-300 μ attingente, gracillimo, ramulis 2 v. 3 etiam gracilibus longissimis ornato. 4105

Hab. in Planete bimaculato, Bhamò, Birmania (L. Fea). — *L. vulgari* affinis sed paraphyse longissima gracilique satis distincta.

132. **Laboulbenia Sebetheos** Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. Buenos Aires XXVI (1915) p. 488, fig. 31. — Eulaboulbenia, haplocytia, melanopsallia, apodotheca, malacochaeta, monomastiga, parvula, 125-175 μ alta, castaneo-fusca, geminata, altera fertilis, altera saepius abortiva; androsticho et gynosticho parvis; perithecio pro ratione magno, 65 ≈ 25, atro, crasse obtusissimeque umbo- 4106

nato, umbone oblique albo-ostiolato; paraphyse elongato, 150-200 μ, flaccido.

Hab. in Sebethe lusca, Aiè-mantcior, Sumatra (O. Beccari).

133. **Laboulbenia stilicicola** Speg., Laboulb. ital. I, in Redia X p. 41 (1914) tab. III, fig. 23. — *L. subterranea* Thaxt. p. p. — (Monomastiga). Parvula gracilis, elongata, 175-250 μ alta, cellula basali prima brevissima conica, praebasali secunda quadruplo longiore cylindrica, pallidis, articulatione septi primi non tumefacta; perithecio atro, subopaco, ad tertium inferum usque androsticho adnato, gracili, elongato, 70-90 × 20-22, ostiolo attenuato-umbonato valde obliquo; paraphyse solitaria, simplice, 150-175 μ longa, a basi ad medium sensim crassiore, articulis paulatim brevioribus et magis infuscatis. 4107

Hab. in Stilico fragili, prope Levico Trentino. — A *L. subterranea* Thaxt. typica, plurimis notis bene distincta.

134. **Laboulbenia sigmoidea** Speg. - Syll. XXII p. 15.— * **L. crucifera** Speg., Laboulb. Arg. p. 638, fig. 168 b. — Eulaboulbenia, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, oligomastiga, majuscula, hyalina v. pallidissime mellea, perithecio rectiusculo umbone nigro ostioloque hyalino donato, paraphysopodio achroo in axi primario fumoso recto erecto crassiusculo, saepius ramululo ventrali ornato, producto, andropodio ramulis 2 horizontaliter divaricatis 1-antheridiatis coronato. 4108

Hab. rarius in abdomine, inter trochanteres, Argutoris confusi, Montevideo, et Arg. bonariensis, Sta Catalina. B. A. Argent. — Perith. 120-135 × 48 52; alt. tot. 250-400 μ.

135. **Laboulbenia rugulosa** Speg., Laboulb. Arg. p. 637, fig. 167.— Eulaboulbenia, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, oligomastiga, mediocris, tota lateritio-umbrina, androsticho gynosticoque obscurioribus fere opacis ac transverse dense atro-rugosis, perithecio pro ratione majusculo elliptico-ovato intense colorato, saepius lineis longitudinalibus 4-nigris tenuibus subrectis notato, obesulo, recto v. lenissime deorsum, subarcuato, basi breviter androsticho adnato, apice modice umbonato, ostiolo vix obliquo et hiante, labiis hyalinis, hypostomo dorso tantum nigrefacto, paraphysibus paucis plus minusve ochraceis subbrevibus. 4109

Hab. in elytris Argutoris bonariensis, La Plata.— Perith. 140-150 × 70-75; alt. tot. 250-350 μ.

136. **Laboulbenia hiemalis** Speg., Lab. Arg. p. 628, fig. 159. — Eulaboulbenia, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, 4110

oligomastiga; parvula fere tota olivacea, cellula basali hyalina, paraphysopodio cellulisque axeos primarii e latere dorsali nigro-marginatis, e latere ventrali nudis v. filamentis paucis tenuibus ornatis, peritheciо subelliptico sursum attenuato-umbonato, ostiolo obliquo minuto, dorso hypostomi nigro.

Hab. vulgata in toto corpore Anthonomi sp., La Plata. — Perith. 45-50 × 18; alt. tot. 90-110 μ.

137. **Laboulbenia oedipus** Speg., Laboulb. Argent. in Anal. Mus. Nac. 4111
Buenos Aires XXIII (1912) p. 222 fig. 52. — Parvula, 100-200 μ alta, fusco-mellea, melanopsallia, oligomastiga; cellula secunda receptaculi percrassa et tumida; peritheciis ellipsoideo-elongatis, 70-90 × 20-38, ad medium fere usque parte distali adnatis, ostiolo obsolete retuso, subobliquo, exappendiculato; paraphysibus solitariis vel geminis, mox articulatim deciduis.

Hab. in Trecho laevigato, La Plata, Argentina.

138. **Laboulbenia Missionum** Speg., Laboulb. Argent. in Anal. Mus. 4112
Nac. Buenos Aires XXIII (1912) p. 220, fig. 50. — Parvula, 150-250 μ alta, hyalina, melanopsallia, oligomastiga; peritheciis subcylindraceis, 120 × 30, parum ostiolum normale infra usque, pleurogene parte distali adnatis; paraphysibus gracilibus elongatis.

Hab. in Carabide quodam (Feronio morpha?), Puerto Bertoni, Misiones, Paraguay, Amer. austr. — *L. barbatae* Thaxt. et *L. Morionis* Thaxt. affinis.

139. **Laboulbenia platensis** Speg., Laboulb. Argent. in Anal. Mus. Nac. 4113
Buenos Aires XXIII (1912) p. 230, fig. 61. — Mediocris 250-400 μ alta, tota mellea, melanopsallia, oligomastiga; peritheciis late ellipsoideis, 100-110 × 50-60, ad apicem fere usque parte distali adnatis, ostiolo obtuso, brevi, exappendiculato, fuscescente; paraphysibus binis, brevibus, crassis; receptaculo subgracili, elongato, extrorsum saepe leniter incurvato.

Hab. in Brachyno bilineato, La Plata, Argentina.

140. **Laboulbenia Blechri** Speg., Laboulb. Argent. in Anal. Mus. Nac. 4114
Buenos Aires XXIII (1912) p. 199, fig. 27. — Fuscidula, parvula, 120-150 μ alta, melanopsallia, oligomastiga; paraphysibus inferne fuscescentibus; peritheciis elongatis, subtorulosis, 50-60 × 25, ad quartum inferum usque parte distali adnatis, ostiolo-obtuso pleurogene vel oblique dehiscente; antheridiis non vivis.

Hab. in Blechro platensi, La Plata, Argentina.

141. **Laboulbenia leptostoma** Speg., Laboulb. Argent. in Anal. Mus. 4115
Nac. Buenos Aires XXIII (1912) p. 217, fig. 47. — Pusilla, 300 μ

circ. alta, subhyalina, melanopsallia, oligomastiga; peritheciis subellipsoideis, 160 × 65, basi breviter parte distali adnatis, apice in ostiolo 1-labiato, 30 × 10 μ, labio cochleato productis; paraphysibus paucis hyalinis.

Hab. in Bembidio indeterm., La Plata, Argentina.

142. **Laboulbenia stolonicola** Speg., Lab. Arg. p. 640, fig. 169. — Eulaboulbenia, melanopsallia, apodotheca, hemisyncarpa, oligomastiga, elongata, gracilis, pallide straminea, androsticho gynosticho nec non perithecii parte infera fumosis, perithecio subcylindraceo-elliptico dorso convexulo ventre plano v. vix concaviusculo, hypostomo nigro antice impresso lineola nigra horizontali eximie limitato, ostiolo obliquo labiis rotundatis, andropodio minuto, paraphysopodio subcylindraceo sat elongato, paraphysibus geminis e cellula basilari oriundis hyalinis praelongis tenuibus. 4116

Hab. in toto corpore Stolonis fulvostigmatis, Sta Catalina B. A. Argent. — Perith. 80-90 × 30-32; alt. tot. 200-225 μ.

143. **Laboulbenia Galeritae** Thaxt. — Syll. XIV p. 732. — *** L. pseudodecipiens** Speg., Lab. Arg. p. 593, fig. 126 g.; *L. decipiens* Speg. non Thxt. Contr. Lab. arg. n. 37, F. — Eulaboulbenia, melanopsallia, podocarpa, malacotricha, subdichroma; parvula, olivacea, cellula basali et pedicello brevi peritheciali hyalinis, cellula II lata brevique aequilatera eximie triangulari-pentagona, septis receptaculi omnibus obliquis perithecio elliptico-cylindraceo, saepius lineis 4 dextrorsis ornato vix umbonato-ostiolato, hypostomo non v. parce infuscato, paraphysibus tenuibus numerosis. 4117

Hab. in elytris Galeritae Lacordairei, Salta et Jujuy Arg. — Perith. tot. 90-105 × 28-40; alt. total. 190-225 μ.

— *** L. subbicolor** Speg., l. c. p. 595, fig. 126 j. — Eulaboulbenia, melanopsallia, podocarpa, malacotricha, subdichroma. A *L. bicolore* Tht. recedit cellulis II et III atris opacis indistinctis marginem dorsalem receptaculi efformantibus, IV et V pro parte tantum nigrefactis atque bene perspicuis, gynosticho pallido, pedicello peritheciali breviusculo, perithecio lineis longitudinalibus tenuibus dextrorsis notato ac paraphysibus brevioribus gracilioribusque. 4118

Hab. in margine inf. abdominis Galeritae ruficollis, Salta Arg. (Richter). — Perith. 140-150 × 42-45; alt. tot. 285-300 μ.

144. **Laboulbenia erectiuscula** Speg., Laboulb. Arg. p. 580, f. 116 a. — Eulaboulbenia, paralaboulbenia, ceratotheca, apodotheca hemisyncarpa, malacochaeta, oligomastiga; major, fere erecta, hinc inde 4119

fumosa, rostro ostioli subteguliformi donato.

Hab. in thorace Argutoris confusi, Montevideo, Sta Catalina et La Plata. — Perith. tot. 105-115 × 45-48; alt. tot. 200-300 μ.

145. **Laboulbenia leptostomoides** Speg., l. c. p. 581, fig. 116 b. — Eulaboulbenia, paralaboulbenia, ceratotheca, apodotheca, hemisyncarpa, malacochaeta, oligomastiga; mediocris incurvata, cellulis I et II hyalinis, ceteris receptaculi fumosis, perithecio obscuriore lineis longitudinalibus 4 nigris cruciatis notato, sub hypostomo pallidiore, ostiolo cochleato ut in typo, hypostomo ventre tantum nigrifacto, psallio parvo, paraphysibus saepius binis fumosis parce breviterque ramuligeris. 4120

Hab. in thorace Argutoris confusi, Montevideo. — Perith. tot. 120-125 × 56-60; alt. tot. 200-250. — Cum praecedenti. *Lab. leptostomae* Speg. cognata.

146. **Laboulbenia funerea** Speg., Laboulb. Argent. in Anal. Mus. Nac. Buenos Aires XXIII (1912) p. 208, fig. 37. — Parva, 250 μ circ. alta, tota atro-fusca, melanopsallia, oligomastiga; peritheciis late subcylindraceis, 100 × 30, parte distali vix ima basi adnatis, ostiolo brevi, obtuso, crassiusculo, integro, exappendiculato; paraphysibus paucissimis, brevibus, mox evanidis. 4121

Hab. in Anaedo carioso, S. Catalina, Argentina.

147. **Laboulbenia tittephora** Speg., Laboulb. Arg. p. 577, fig. 114. — Eulaboulbenia, paralaboulbenia, theletheca, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, oligomastiga, mediocris, elongata, gracilis, fumoso-flavescens, cellulis II e III, saepe IV etiam, grosse granulosis, perithecio angusto, ad medium papillis duabus horizontalibus fuscis ornato, hypostomo coarctato nigro ad ventrem foveolato-impresso, ostiolo, obtuso obliquo, labiis conniventibus hyalinis, paraphysibus paucis chlorinis. 4122

Hab. in elytris Harpalidei sp. indet., Jujuy Argent. — Perith. 80-96 × 28-30; alt. tot. 250-350.

148. **Laboulbenia Tachyis** Thaxt.— Syll. XVIII, p. 920.— * **L. diversipes** Speg., Laboulb. Arg. p. 642, fig. 171 a. — Eulaboulbenia, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, oligomastiga; a typo cellulis basali et praebasali magnitudine summopere ludentibus, pecithecio paraphysibusque brevioribus crassioribusque distincta. 4123

Hab. in artubus Tachyis corruscantis, La Plata Arg.— Perith. 60-80 × 22-28; alt. tot. 100-300 μ.— * **L. subbitubercu-**

lata Speg., Lab. Arg. p. 644, fig. 171 b. — Eulaboulbenia, melanopsallia apodotheca, hemisyncarpa, malacochaeta, oligomastiga, elongata, gracilis, paraphysopodio dorso gibbuloso, cellulis una v. duabus basilaribus axium subglobosis nigro-septatis, perithecio obscure fumoso ad medium leniter angulato-subgibboso atque, androphodium contra, macula parva orbiculari fusca notato.

Hab. in elytris Tachys? sp., La Plata et Montevideo. — Perith. 70-75 × 18-20 ; alt. tot. 180-220 μ,

149. **Laboulbenia distinguenda** Speg., Lab. Arg. p. 621, fig. 153. — Eu- 4124
laboulbenia, melanopsallia, apodotheca, hemisyncarpa, melanochaeta, oligomastiga, tota plus minusve pallide olivascente, paraphysopodio nec non cellulis inferis axeos paraphysarii primarii olivascentibus dorso nigro-marginatis, superficie totius receptaculi, cellula basali excepta, transverse dense minuteque papilloso-rugulosa, perithecio elongato-ovato normali.

Hab. in elytris Carabidorum quorumdam ind., Salta et La Plata Argent. — Perith. 75-85 × 35-40 ; alt. tot. 175-225 μ.

150. **Laboulbenia Richteri** Speg., Lab. Arg. p. 636, fig. 166. — Eula- 4125
boulbenia, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, oligomastiga, mediocris, pallidissime mellea, elongata, gracilis, dorsum versus leniter arcuata, septo 2 valde obliquo, cellulis totius receptaculi dense minuteque transversim rugulosis, perithecio elongato-fusoideo, umbonato-ostiolato, hypostomo nigro, labiis ostiolaribus conniventibus obtusis hyaliniis, paraphysibus, subbrevibus, paraphysopodio nec non axeos paraphysarii cellulis inferis dorso nigro-marginatis.

Hab. in elytris minuti Carabidei (Pterostichus?), Salta Argent. — Perith. 90-110 × 32-36 ; alt. tot. 275-325.

151. **Laboulbenia argyropotamica** Speg., Laboulb. Arg. p. 598, fig. 129.— 4126
Eulaboulbenia, melanopsallia, apodotheca, eleutherocarpa malacochaeta, oligomastiga, subparva, tota olivacea, septis 1, 2 et 3 valde obliquis, perithecio cylindraceo-subfusoideo ab ima basi libero sursum in ostiolo obtusiusculo hyalino, hypostomo nigro, attenuato, androstichi parte supera libera, paraphysopodio brevissimo paraphyses geminas 5-6-meras, septis nigras coarctatulas fulcente, androphodio minimo 1-antheridiato.

Hab. in elytris Clivinae longipennis, in insula Santiago, La Plata. — Perith. 80-110 × 28-30 ; alt. tot. 150-200 μ.

152. **Laboulbenia flagellata** Peyr. — Syll. XIV p. 731 — * **L. gracilis** 4127
Speg., Laboulb. ital. I, in Redia X, p. 51 (1914) tab. VI fig. 39.—

(Oligomastiga). Forma sat pallida et pellucida 175-200 μ alta, pro ratione gracilis et elegans, tuberculo ostiolari valido, hypostomo nigro, ostioli labiis hyalinis, perithecio normali, 70-75 × 30, basi ad tertium usque androsticho adnato, paraphysibus paucis elongatis, 150-300 μ longis.

Hab. in Ophono maculicorni, prope Coneglanum, Ital. bor.

— * **L. harpalicola** Speg., l. c. p. 52, tab. VI fig. 40. — Differt a typo habitu magis elongato, paraphysopodio et andropodio non incrassatis, peritheciis magis rotundatis, pallidioribus pellucidisque. Alt. 225-250 μ, perith. 75-80 × 35 40, paraph. major. 200 μ alta. 4128

Hab. in Anchomenido indeterm., Roma, et in Harpalo aeneo, in silva Cansiglio prope Tarvisium, It. bor.

— * **L. pseudoflagellata** Speg., l. cit. p. 52, tab. VI fig. 41. — A typo recedit habitu crassiore brevioreque atque umbone ostiolari brevi obtuso, hypostomo non infuscato, labiis subdenticulatis et peritheciis lenissime dextrorsum tortis. — Alt. 175-200 μ; perith. 60 × 35. Affinis etiam *L. polyphagae* Thaxt. 4129

Hab. in Abaceto Salzmanni in Sardinia, et Pogono littorali, in Apulia, Ital. austr.

— * **L. romana** Speg., l. cit. p. 53, tab. VI fig. 42. Forma satis infuscata, receptaculo angusto, cellulis prima et secunda subaequilongis, androsticho superne tumido et dorso subgibboso recedens. — Alt. 150-200 μ, perith. 65-70 × 25, paraph. 150-200 μ alt. 4130

Hab. in Ophono planicolle et O. mendace, Roma, Ital. centr.

— * **L. strictipes** Speg., l. c. p. 53, tab. VI fig. 43. — A typica recedit colore melleo pallido, umbone peritheciali brevi, late rotundato, hypostomo nigro ostioloque hyalino sed praecipue cellula basali dimidia infera cylindrica, dimidia supera abrupte turbinosa. — Alt. 150-175 μ; perith. 75-80 × 30-35, paraph. 120-200 μ alt. 4131

Hab. in Laemostenide algerino, prope Sassari, Sardinia.

— * **L. paranensis** Speg., Lab. Arg. p. 625, fig. 155 c. — Eulaboulbenia, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, oligomastiga; majuscula, subhyalina, perithecio ellipsoideo dorso valide incurvo superne fere subgibboso apice abrupte oblique rotundato, umbone brevi nigro, labiis ostiolaribus obtusis coronato, paraphysopodio andropodioque hyalinis parte infera paraphysum pallide olivacea. 4132

Hab. in toto corpore Parameci cylindrici; Paranà, Entre Rios (J. Mac Donagh).

— * **L. anysodactylicola** Speg., Lab. Arg. p. 623, fig. 155 a.— Eulaboul- 4133
benia, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, oligomastiga, submajuscula, tota pallidissime straminea, receptaculo elongato angusto, cellula IV sub psallio truncata atque dorso angulato-prominente, perithecio valido umbonato, hypostomo nigro ad ventrem impresso-subfoveolato, labiis ostioli obliqui prominulis rotundatis, paraphysibus paucis hyalinis.

Hab. pervulgata in toto corpore Anysodactyli cupripennis, Montevideo, Salta, Tucuman. Catamarca, Cordoba, Buenos Aires, La Plata. — Perith. 85-120 × 22-35; alt. tot. 200 500 μ.

— * **L. lepidioides** Speg., Rev. Lab. arg. p. 624, *L. lepida* Speg. (non 4134
Thaxt.) Contr. Lab. Arg. p. 40, fig. 46. — Eulaboulbenia, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, oligomastiga, cellulis I et II hyalinis, ceteris paraphysibus ac praecipue perithecii parte infera chlorinis, cellula II inflatula, perithecio elliptico elongato erecto, paraphysopodio majusculo andropodioque parvulo.

Hab. in elytris Harpali sulcatuli, Misiones, Rep. Arg.— Perith. 100-110 × 35-40; alt. tot. 300-400 μ.

— var. **Bordei** Maire, Bull. Soc. Hist. nat. Afrique du Nord IV n. 9., 4135
p. 2, tab. II fig. 6-8 (1912). — A typo speciei maxime variabilis non differt nisi ascosporis brevioribus et angustioribus, 50 52 × 4-5.

Hab. in Harpalo tenebroso, Coleopt., Agoulmine-Aberkane in Afkadou, Africa bor. (R. de Borde).

153. **Laboulbenia algerina** Speg., Laboulb. ital. I, in Redia X p. 45 4136
(1914) tab. IV fig. 30 et in Anal. Mus. Nac. Buenos Aires XXVI (1915) p. 489.— Eulaboulbenia, haplocytia, melanopsallia, apodotheca, malacochaeta, oligomastiga, a *L. flagellata* Peyr. turgiditate cellulae quartae androstichi, crassitudine majore, ostiolo magis rotundato recedens, colore autem rufescente *L. Rougeti* Rob. accedens, sed cellulis inferis axeos paraphysarii primarii paraphysopodioque non atratis distincta.--Alt. 200-300 μ; perith. 100-115 × 45-65; paraph. 200-250 μ alt.

Hab. in Pristonycho algerino in Italia (Latium, Sardinia) et in Africa bor. (Tunisia), nec non in Pr. hepatico, Teheran, Persia.

154. **Laboulbenia paupercula** Speg., Laboulb. ital. II, in Anal. Mus. 4137
Nac. Buenos Aires, XXVII (1915) p. 59 fig. 25. — Eulaboulbenia, haplocytia, melanopsallia, apodotheca, malacochaeta, oligomastiga,

parva, 220 μ alta, pallida; cellulis basali et praebasali elongatis, subcylindraceis; androsticho brevi crassoque, cellula tertia maxima, quarta minima, psallio angusto, atro, parum distincto coronato; gynosticho normali, cellula decima turgida et valde prominula; perithecio ad quartum inferum tantum androsticho adnato, subfusoideo, 80 × 25, ventre inflatulo, superne elongatulo, in ostiolo parum obliquo subhyalino producto; paraphysopodio gibboso, noduloso, atro, opaco; antheridopodio majusculo, atro, parum distincto; paraphysibus paucis, brevibus, penicilliformibus.

Hab. in Tachyis sp. indet., Roma, Ital. centr. — Affinis *L. Tachyis* Thaxt. et *L. Blechri* Speg. sed distincta.

155. **Laboulbenia pedicellata** Thaxt. — Syll. XIV p. 733 — **L. * bogosensis** Speg., Laboulb. Mus. ital. in Anal. Mus. Nac. Buenos Aires XXVI (1915) p. 496, fig. 37. — Oligomastiga. Habitu graciliore, cellula praebasali magis inflata nec non perithecio ab androsticho omnino libero a typo recedere videtur. — Alt. 200-250 μ, perith. 90-100 × 30, paraph. 60-120 μ alt. 4138

Hab. in Anchomeno fusicorni, Ansala, Bogos, Africa (O. Antinori).

— *** L. ventricosa** Speg., Laboulb. Arg. p. 608, fig. 142 b. — Eulaboulbenia, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, brachymastiga, parva, tota fumosa, cellulis I et II anguste pedicelliformibus, androsticho gynostichoque dense minuteque punctulatis, perithecio valide ventricoso. 4139

Hab. in elytris Bembidii mendocini, Alto Pencoso, San Luis Arg. — Perith. 75-80 × 40-45; alt. tot. 150-175 μ.

156. **Laboulbenia Pterostichi** Thaxt.— Syll. XIV p. 734.— *** L. Charrua** Speg., Lab. Arg. p. 634, fig. 165 b. — Eulaboulbenia, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, oligomastiga, tota hyalina, linea media perithecii ejusdem cum androstichi adhaerentia atque paraphysis simplicis parte superiore saepe leniter fumosis. 4140

Hab. in elytris Feroniomorphae moerentis, Montevideo. — Perith. 80-110 × 25-40; alt. 200-300.

157. **Laboulbenia Cryptici** Speg., Laboulb. Arg. p 620, fig. 152 — Eulaboulbenia, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, oligomastiga, parvula, fere tota olivacea; cellula basali subhyalina praebasalem subaequante, tertia ceteris saepius obscuriore, quinta et septima segmentiformibus minimis, psallio subcrassiusculo latiusculoque, paraphysopodio ejusdemque axeos primari cellulis inferis intense coloratis atque dorso nigricantibus, paraphyse solitaria v. 4141

geminata, perithecio elongato-ellipsoideo, umbonato-ostiolato, hypostomo nigro, ostiolo obliquo labiis parum evolutis.

Hab. in elytris Cryptici platensis, Chaco Argent. — Perith. 70-80 × 30-32; alt. tot. 175-200 μ.

158. **Laboulbenia jujuyensis** Speg., Lab. Arg. p. 630, fig. 161. — Eulaboulbenia, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, oligomastica, tota obscure olivacea, cellula basali pallida, praebasali medio subcoarctata minute transversim rugulosa, ceteris receptaculi obsolete fusco-maculatis, perithecio elliptico-sublanceolato sursum attenuato vix umbonato, ostiolo subobliquo labiis pallidioribus parum hiantibus donato, lineis longitudinalibus dextrorsis 4 nigris notato, paraphyse unica simplice crassiuscula oligomera fusca, ramulis antheridialibus gracilibus brevisculisque. 4142

Hab. in elytris Egae argentinae, Jujuy, Argent.— Perith. 120-135 × 45-50; alt. tot. 300-325 μ.

159. **Laboulbenia formosa** Speg., Lab. Arg. p. 626, fig. 156, *L. polyphaga* Speg., Contr. Lab. Arg. n. 56 fig. 62 e, non Thaxt. — Eulaboulbenia, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, oligomastiga, mediocris, tota pallide olivacea, paraphysopodio oblique elliptico, articulos 2 superpositos isomorphos sensim minores gerente, omnibus tribus dorso paraphysem obliquam simplicem obscure-olivaceam fulcentibus. 4143

Hab. in elytris Harpali sp., Formosa in Chaco boreali. — Perith. 100-110 × 40-42; alt. tot. 245-275.

160. **Laboulbenia siramboensis** Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. Buenos Aires XXVI (1915) p. 498 fig. 40. — Eulaboulbenia, haplocytia, melanopsallia, apodotheca, malacochaeta, oligomastiga, parvula, 150-175 μ alta, fusco-mellea, ad septa omnia valide constricta; habitu subtoruloso; cellula praebasali brevi, subglobosa; perithecio androsticho ad dimidium fere adnato, anguste ellipsoideo, 75 × 25-30, grosse umbonato oblique ostiolato; paraphysibus paucis, elongatis, 75-100 μ, fumosis. 4144

Hab. in Anchomenidis sp., Sirambò, Sumatra. — Habitu toruloso satis distincta, ceterum *L. flagellatae* Peyr. affinis.

161. **Laboulbenia Anisodactyli** Speg., Laboulb. ital. I, in Redia X p. 46 (1914) tab. IV fig. 31. — Eulaboulbenia, haplocytia, melanopsallia, apodotheca, malacochaeta, oligomastiga, mediocris, 350-400 μ alta, subfumoso-olivascens; paraphysodio et andropodio atratis coalescentibusque; paraphysibus paucis, fumosis, 50-100 μ longis; perithecio late elliptico, 110-130 × 60-65, obscure fuscescente, grosse umbonato, 4145

ostiolo obliquo labiis concoloribus; cellula androstichi quarta infuscata, quinta subhyalina nitida, decima autem gynostichi opaca, subnigra et tumida.

Hab. in Anisodactylo binotato, Lovajano prope Pisam, Ital. bor.-centr.

162. **Laboulbenia Axinotomae** Speg., Laboulb. Mus. ital., in Anal. Mus. 4146
Nac. Buenos Aires XXVI (1915) p. 490 fig. 33. — Eulaboulbenia, haplocytia, melanopsallia, apodotheca, malacochaeta, oligomastiga, mellea, parva, 250 μ alta; cellula praebasali majuscula, leniter incrassata; perithecio subcylindraceo 90 × 30, parum magis infuscato, apice grosse umbonato, hypostomo nigro, ostiolo obliquo labiis gracilibus hyalinis; paraphysibus paucis, elongatis, 300-350 μ, non incrassatis.

Hab. in Axinotoma fallace, Bolama, Guinea lusitanica (L. Fea). – *L. flagellatae* Peyr. proxima sed satis, ut videtur, distincta.

163. **Laboulbenia etrusca** Speg., Laboulb. ital. I, in Redia X p. 50 4147
(1914) tab. V fig. 36. — Eulaboulbenia, haplocytia, melanopsallia, apodotheca, malachochaeta, oligomastiga, 275-300 μ alta, cellulis basali et praebasali subhyalinis, ceteris atris opacis; perithecio subelliptico 110-125 × 50, nigro opacoque, apice sensim obtuse umbonato, ostiolo non vel vix distincto; paraphysibus saepius binis fumosis, interna crassiore validioreque, 16-20 μ diam., externa 10-12 μ. — Certe affinis *L. vulgaris* Peyr. sed bene distincta.

Hab. in Bembidio conforme, prope Pistoia, Ital. bor. centr.

164. **Laboulbenia maroccana** Speg., Laboulb. Mus. ital. in Anal. Mus. 4148
Nac. Buenos Aires XXVI (1915) p. 494, fig. 36. — Eulaboulbenia, haplocytia, melanopsallia, apodotheca, malacochaeta, oligomastiga, mediocris, 250-275 μ alta, tota pallide mellea; cellulis secunda, tertia et quarta transverse minute rugulosis; perithecio brevi, crasso, 90-100 × 40-45, superne vix angustato, crassissime obtusissimeque umbonato, non vel vix infuscato, ostiolo parum manifesto; paraphysopodio cylindraceo paraphysem unicam 8-10-articulatam, 250-300 × 15-20 gerente; antheridiopodio subconoideo in paraphysem 7-8-articulatam producto, articulo secundo biantheridiifero.

Hab. in Brachyno bombarda, Tangeri, Marocco, Afr. bor. — *L. polyphagam* Thaxt. et *L. flagellatam* Peyr. in mentem revocans, sed distincta.

165. **Laboulbenia Bottegoi** Speg., Laboulb. Mus. ital., in Anal. Mus. 4149

Nac. Buenos Aires XXVI (1915) p. 491 fig. 34. — Eulaboulbenia, haplocytia, melanopsallia, apodotheca, malacochaeta, oligomastiga, minima, 75-100 μ tantum alta; obscure mellea, translucens; cellula basali breviter cylindracea, praebasali subturbinata; paraphysopodio amplo, hyalino; axi paraphysario primario simplici, 2-3-grosse nigro-annulato, perithecio subcylindraceo, 35 × 10, apice grosse umbonato, lateraliter ostiolato; paraphysibus paucis, 75 μ longis.

Hab. in Casnonia punctulata, Borân, Somalia (G. Bottego).

166. **Laboulbenia Ophoni** Thaxt. — Syll. XVI p. 687. — * **L. augusta** Speg., Laboulb. ital. I, in Redia X p. 57 (1914) tab. VII fig. 49. Oligomastiga. A typo differt tumiditate minore et omnibus partibus gracilioribus pallidioribusque. — Alt. 160-175 μ, perith. 65 × 30, paraph. 100-125 μ longis. 4150

Hab. in Harpalo aeneo et in Ophono sp., in Ital. bor. (Ven.) et centr.

— * **L. fuscula** Speg., l. cit. tab. VII fig. 50. — A typo colore fusco-melleo omnium partium paraphysibusque plus minusve fumosis vel nigrescentibus recedit. — Alt. 125-175 μ, perith. 60-75 × 25-40, paraph. 100-125 μ. 4151

Hab. in Harpalo flavicorni, Firenze, Ital. centr.

— * **L. insulicola** Speg., l. cit., tab. VII fig. 51. — A typo recedit statura majore et totius corporis elongatione ac gracilitate psallioque nigro crassiore nec non saepe axi paraphysali primario fumoso vel nigrifacto. — Alt. 200-250 μ, perith. 90-100 × 35-40, paraph. 150-250 μ alt. 4152

Hab. in Harpalo pubescente, ex ins. Elba, et in Ophono rupicola prope Romam, Ital. centr.

— * **L. minuscula** Speg., l. cit., p. 58, tab. VII, fig. 52. — A typo recedit statura conspicue minore et omnium partium gracilitate. — Alt. 90-100 μ, perith. 45-50 × 18-20, paraph. 125-150 μ longis. 4153

Hab. in Harpalo sulfuripede, prope Romam, It. centr.

— * **L. sepulchretorum** Speg., l. c., p. 59, tab. VII fig. 53. — Statura et turgescentia nonnihil minoribus, constrictionibus ad septa validioribus sat a typo distincta. — Alt. 125-150 μ, perith. 60 × 22, paraph. major 75-100 μ alta. 4154

Hab. in Harpalo rubripede, in cemeterio, Coneglanum, It. bor.

— var. **dilatata** Maire, Bull. Soc. Hist. Nat. Afrique du Nord, t. 11., 4155

1920, Extr. p. 24, fig. 5. – A typo differt statura elongata, receptaculo infra appendices et perithecium dilatato, perithecio leniter atro-fusco suffuso, cellula quinta minore breviore, ascosporis majoribus (46-48 × 5).

Hab. in Ophono pubescenti L., Mouzaïaville, Algeria, Africa bor.

167. **Laboulbenia guineensis** Speg., Laboulb. Mus. ital., in Anal. Mus. 4156
Nac. Buenos Aires XXVI (1915) p. 493 fig. 35. — Eulaboulbenia, haplocytia, melanopsallia, apodotheca, malacochaeta, oligomastiga, mediocris, 350-400 μ alta, rufescenti-fusca; cellula praebasali elongata, subcylindrica, ventre convexa, ad septum primum et secundum constricta; perithecio majusculo, cylindraceo, 125-140 × 35-50, grosse umbonato, vix bilobo-ostiolato; paraphysibus paucis, 150-250 μ altis; paraphysopodio et cellula basali axeos paraphysarii primarii margine externo, saltem in juventute, infuscatis.

Hab. in Megalonycho acanthuro, Bolama, Guinea lusitanica (L. Fea). — *L. Rougeti* Rob. et *L. Catascopi* Thaxt. notis variis proxima sed satis distincta.

168. **Laboulbenia Olistopi** Speg., Laboulb. ital. I, in Redia X p. 55 4157
(1914) tab. VII fig. 47 et in Anal. Mus. Nac. Buenos Aires XXVI (1915) p. 495. — Eulaboulbenia, haplocytia, melanopsallia, apodotheca, malacochaeta, oligomastiga, parvula, 175 μ alta, rufescenti-atra, pellucida; perithecio opaco, 75 × 40, ostiolo laterali obtuso, labio ventrali tantum hyalino; paraphysibus rigidulis, parum elongatis, simplicibus, subhyalinis, primaria 125 μ alta.

Hab. in Olistopo rotundato in Toscana, Ital. bor.-centr., et O. Sturmii in Saxonia. — Affinis *L. flagellatae* et *L. polyphagae* a quibus facile distinguitur colore rufescente ut in *L. Rougeti* Rob.

169. **Laboulbenia coneglanensis** Speg., Laboulb. ital. I, in Redia X 4158
p. 47 (1914) tab. IV fig. 32. — Eulaboulbenia, haplocytia, melanopsallia, apodotheca, malacochaeta, oligomastica, mediocris, 250-400 μ alta, fuscidula, elongata; cellula basali brevi, obconoidea, 40-50 × 20-25; praebasali duplo triplove longiore, cylindracea, 80-150 × 22-32; septo primo plus minusve infuscato, leniter sed semper constrictulo; perithecio subcylindraceo 100-125 × 30-50, obscuriore, deorsum breviter androsticho connato, sursum conoideo vel subrotundato, in ostiolo valido, hypostomo atro, oblique truncato, labiis hyalinis donato producto; paraphysibus paucis subhyalinis, longiusculis, 175-250 μ longis.

Hab. in Ophono pubescente in Italia boreali. - Affinis *L. flagellatae* Peyr. et *L. melanariae* Thaxt.

— * **L. grisea** Speg., l. cit. p. 48, tab. V fig. 33. — A typo recedit cellula praebasali conspicue breviore et crassiore, septo primo validius constricto et nigrificato, peritheciis subpallidioribus, paraphysibus binis vel ternis tantum. — Alt. 200-225; cellula basalis 35 × 20, praebasalis 40 × 20, perith. 100-30-35, paraph. 220-225 μ. 4159

Hab. in Ophono hospite, Roma, et O. griseo, prope Coneglanum, in Italia bor.

— * **L. psittacea** Speg., l. cit. p. 48, tab. V fig. 34. — A typo recedit statura minore et gracilitate omnium partium, cellula basali parum quam praebasali breviore sed aequicrassa, hyalina, septo valide coarctato, perithecio nigro opaco, ostioli labiis etiam nigris, cellula quarta androstichi atrata saepius opaca, paraphysum subhyalinarum axi primario supra articulum secundum divaricate uniramoso. — Alt. 200-275 μ, cellula basalis 50 × 20, praebasalis 75 × 20, perith. 100-110 × 25-30, paraph. 225-250 μ alt. 4160

Hab. in Harpalo psittaceo, prope Coneglanum, Italia boreali.

170. **Laboulbenia Paumamuae** Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. Buenos Aires XXVI (1915) p. 506 fig. 46. — Oligomastiga. Parvula, 80-125 μ alta, fuscula; receptaculo turbinato, cellula basali majuscula obconica, praebasali trapezoide, e latere dorsali cellula gynostichi infera vacuoliformi, supera pusilla triangulari ornata; androsticho subnormali, psallio atro minuto parum manifesto coronato; axi paraphysario primario infuscato patentim acuto, superne in paraphysopodio subcylindraceo majusculo dorso axi paraphysali secundario longiusculo simplice vel bifido producto; antheridiopodio parvulo monomero; perithecio subfusoideo, leniter inaequilatero, 50-60 × 20, distincte umbonato, ostiolo minuto laterali, obliquo; paraphysibus 200-250 μ longis. 4161

Hab. in Paumamua sulcicolli, Paumamua River, Nova Guinea (E. Modigliani).

171. **Laboulbenia Scaphidomorphi** Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. Buenos Aires XXVI (1915) p. 497, fig. 39. — Eulaboulbenia, haplocytia, melanopsallia, apodotheca, malacochaeta, oligomastiga, mediocris, 200-250 μ alta, pallide castaneo-mellea, leniter sed distincte dorso arcuata; cellula praebasali crassa; perithecio obscuriore, ad tertium inferum androsticho adnato, cylindraceo, superne curvulo, 60-75 × 35, in umbone suboblique truncato cras- 4162

sissimo producto; paraphysibus saepius geminis, elongatis, pallidis, deciduis, 150-200 μ altis.

Hab. in Scaphidomorpho Bosci, Chiriquì Panama, Amer. Centr. (E. Ribbe). — Species prope apicem gibboso-curvata, a caeteris omnibus facile dignoscenda.

172. **Laboulbenia elegantissima** Speg., Argent. in Anal. Mus. Nac. Buenos Aires XXIII (1912) p. 205 fig. 33. — Subparva, 200-250 μ alta, tota obscure fuliginea, melanopsallia, polymastiga; peritheciis ellipticis, rectis, 100 × 45-50, ad tertium inferum usque parte distali connatis, ostiolo breviter umbonato, regulari, exappendiculato; paraphysibus atris, fragillimis, subgracilibus. 4163

Hab. in Feroniomorpha cordicolle, prope La Plata, Argentina. — *L. variabili* Thaxt. et *L. fumosae* Thaxt. proxima.

173. **Laboulbenia Dailodonti** Speg., Laboulb. Argent. in Anal. Mus. Nac. Buenos Aires XXIII (1912) p. 203 fig. 32. — Majuscula, 600-800 μ alta, tota pallide olivacea, melanopsallia, polymastiga; peritheciis basi brevissime parte distali adnatis, cylindraceis, 250-270 × 90, ostiolo obtuso, vix obliquo, exappendiculato; paraphysibus paucis, bifidis, crassis, subhyalinis. 4164

Hab. in Dailodonto clandestino, Tucuman, Amer. austr.

174. **Laboulbenia Antarctiae** Speg., Laboulb. Argent. in Anal. Mus. Nac. Buenos Aires XXIII p. 196 (1912) fig. 24. — Tota fuscidula, mediocris, 200-300 μ alta, melanopsallia, polymastiga; peritheciis ovoideis, 100-120 × 50-60, parte distali ad tertium inferum usque connatis, lineis 4 longitrorsis subspiralibus reticulatis, ostiolo brevissimo, lato, obtuso, obliquo, nigrescente, exappendiculato; paraphysibus subnigricantibus, nodoso-serratis. 4165

Hab. in Antarctia blanda, Cordoba, Argentina. — Quoad perithecia *L. decipiens* Thaxt., quoad paraphyses *L. Pheropsophi* Thaxt. in mentem revocat.

175. **Laboulbenia Chlaenii** Speg., Laboulb. Argent. in Anal. Mus. Nac. Buenos Aires XXIII (1912) p. 201 fig. 29 et in Anal. cit. XXVI (1915) p. 459. — Majuscula, 400-500 μ alta, mellea, hyalopsallia, polymastiga; receptaculo obconico inferne elongato, gracili atque incurvato; perithecio ellipsoideo, 175-180 × 70-75, ad tertium vel quartum inferum tantum parte distali adnato, ostiolo brevi nigrescenti obtuso obscureque subbilabiato; paraphysibus numerosis gracillimis simplicibus elongatis. 4166

Hab. in Chlaenio platensi, purpurato, cuma-

tili, La Plata, Isla Santiago, Argentina, Montevideo, California. — *L. variabilis* Thaxt. et *L. proliferanti* Thaxt. affinis.

176. **Laboulbenia proliferans** Thaxt. — Syll. XVII p. 923 — * **L. subdivaricata** Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. Buenos Aires, XXVI (1915) p. 462 fig. 7. — Psalliophora. A typo recedit cellulis proliferantibus tribus in paraphysibus tribus praelongis, 300-400 μ usque attingentibus, simplicibus, basi septis nigris plane destitutis productis. — Alt. 500-600 μ; perith. 175 × 50. 4167

Hab. in Chlaenio pectinipede, Karin-geçu, Birmania (L. Fea).

— * **L. subinterposita** Speg., Laboulb. ital. I, in Redia X p. 33 (1914) fig. 9. 4168

Hab. in Harpalo sulfuripede, in Italia. — Long. tot. 175-375 μ.

177. **Laboulbenia Lagari** Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. Buenos Aires XXVI (1915) p. 479 fig. 23. — Pseudoditheca. Haplocytia, parva, 270-300 μ alta; cellula basali cylindrica, praebasali abrupte turbinata; gynosticho brevi parum manifesto; androsticho elongato, perithecio adnato, psallio normali atrato; paraphysopodio maximo, cylindraceo, fumoso, apice articulo axeos primarii paraphysarii lageniformi, 50 × 40, coronato; antheridiopodio minuto penicillum antheridiorum pusillum fulcente; perithecio adhuc immaturo. 4169

Hab. in Lagaro inepto, Bone, Algeria. — Species rursus inquirenda.

178. **Laboulbenia Feae** Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. Buenos Aires XXVI p. 465 fig. 10. — Haplocytia, apodotheca, schizosoma, subparva, 200-300 μ alta, gracilis, fuscula; cellulis basali et praebasali cylindraceis, elongatis, subhyalinis; androsticho majusculo, etiam cylindraceo, apice breviter libero atque psallio atro valide constricto coronato; paraphysibus hyalinis, elongatis, 250-300 μ longis, paucis; gynosticho abbreviato, cellula septima fere abortiva; perithecio elliptico-subcylindraceo, 85 × 30, subnigrescente, crasse umbonato, hypostomo nigro, ostiolo oblique truncato, labiis hyalinis donato. 4170

Hab. copiosa in Deropeltide sp., in ins. St. Tomè, Afr. lusitanica (L. Fea).

179. **Laboulbenia Elaphri** Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. Buenos Aires XXVI (1915) p. 64 fig. 9. — Haplocytia, schizosoma, melanopsallia, pallida, 250 μ alta; cellulis basali et prae- 4171

basali subturbinatis majusculis; androsticho apice breviter libero, valide rotundato-constricto, psallio nigro coronato; gynosticho normali; perithecio infuscato, elliptico-subcylindrico, 125 × 40, breviter crasseque umbonato; paraphysibus paucis, divaricatis, fuscescentibus, 150 μ longis, axi primario ramum secundarium validiorem, torulosum ac nigrefactum fulcente.

Hab. in Elaphro cupreo, ex Belgio. — Affinis *L. clivinali* Thaxt. sed facile distinguenda.

180. **Laboulbenia Brachyonychi** Thaxt. — Syll. XVI p. 683. — * **L. Euschizomeri** Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. Buenos Aires XXVI (1915) p. 463 fig. 8. — Schizosoma. A typo differt statura conspicue minori (200-250 μ), perithecio (100-125 × 25) brevius pedicellato, ostiolo rotundato-subtruncato, cellula quinta minus perspicua, paraphysibus pluribus brevioribus, 50-100 μ altis. 4172

Hab. in Euschizomero aeneo, Tikekae, Pegù, Birmania, Indiae or. (L. Fea).

181. **Laboulbenia Rhytisterni** Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. Buenos Aires, XXVI (1915) p. 466 fig. 11. — Haplocytia, schizosoma, melanopsallia, malacochaeta, oligomastiga, mediocris, 300-500 μ alta, mellea; cellula praebasali elongata, satis inflata; androsticho sursum breviter libero, psallio crassiusculo nigro coronato, paraphysibus paucis, divaricato-ramulosis, 150-200 μ longis aucto; perithecio elliptico, 120-150 × 50-60, apice grosse umbonato, umbone nigro oblique truncato, ostiolo parum perspicuo. 4173

Hab. in Rhytisterni sp. indet., Rock-Hampton, Australia. — *L. pallescenti* Thaxt. et *L. clivinali* Thaxt. cognata.

182. **Laboulbenia Sphodri** Speg., Laboulb. ital. I, in Redia X p. 36 (1914) tab. II fig. 15. — Eulaboulbenia, haplocytia, melanopsallia, apodotheca, schizosoma, majuscula, 400-500 μ alta, infuscata; paraphysopodio nec non andropodio percrassis coalescentibusque, cellula basali axeos primarii nigrescente, ceteris vix fumosis valde proliferis; perithecio 150-200 × 75 80, nigro, parte dorsali supera excepta, androsticho plus minusve concolore, cellula tamen quinta pallida, ad medium usque connato, ostiolo grosse umbonato, obliquo, saepius nigrificato, labiis vix decoloribus; paraphysibus 100-300 μ longis. 4174

Hab. in Sphodro Schreibertii, in alpinis Forum Julii, It. bor.

183. **Laboulbenia Morionis** Thaxt. — Syll. XIV p. 733. — * **L. morionicola** Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. Buenos Aires XXVI 4175

(1915) p. 480 fig. 24. — Synandrocarpa. Parvula, 200-250 μ alta, fusca; perithecio ad medium usque tantum saepius androsticho adnato, 65 × 25, umbone crasso, obtuso, nigro, ostiolo sublaterali minuto, labiis subhyalinis donato; paraphysibus paucis, fragilibus, mox deciduis.

Hab. in Morione humerato, Fly-river, Nova Guinea (E. De Albertis).

184. **Laboulbenia Euplinis** Speg., Laboulb. Mus. ital., in Anal. Mus. 4176
Nac. Buenos Aires XXVI (1915) p. 483 fig. 26. — Haplocytia, melanopsallia, apodotheca, malacochaeta, oligomastiga, strombotheca, parva, 200-250 μ alta, e melleo brunneo-picea, pellucida; cellula basali brevi, turbinata, dimidio supero infuscata, praebasali subcylindracea, ad septum sextum valide constricta; perithecio ellipsoideo, 100 × 45, androsticho basi breviter adnato, lineis utrimque duobus obliquis magis fuscis clathrato, apice longe umbonato, umbone superne eximie rotundato; psallio atro, crasso, brevi; paraphysibus elongatis, crassiusculis, 250-300 μ longis, pallidis, grosse articulatis.

Hab. in Eupline cyanipenni, Selebes (O. Beccari).

185. **Laboulbenia trachypus** Speg., Laboulb. Mus. ital., in Anal. Mus. 4177
Nac. Buenos Aires XXVI (1915) p. 486 fig. 29. — Eulaboulbenia, haplocytia, melanopsallia, malacochaeta, oligomastiga, apodotheca, theletheca, parvula, 175 μ alta, pallide mellea, pellucida; cellula basali subconica levi, praebasali subcylindrica leniter infuscata, annulis papillarum densarum minutarumque transversis duodecim ornata, ceteris normalibus; androsticho perithecio ad dimidium et ultra adnato; perithecio ellipsoideo-elongato, 60 × 20, hypostomo nigro torquato, ventri foveolato-depresso, ostiolo obliquo, labiis hyalinis; paraphysibus paucis, fragilibus, hyalinis, deciduis.

Hab. in Dromii? sp., Rio Cassine, Guinea lusitanica (L. Fea).

186. **Laboulbenia Ragazzii** Speg., Laboulb. Mus. ital., in Anal. Mus. 4178
Nac. Buenos Aires XXVI (1915) p. 485 fig. 28. — Eulaboulbenia, haplocytia, melanopsallia, malacochaeta, apodotheca, oligomastiga, theletheca, parvula, 200-250 μ alta, pallida; cellula basali obconica, praebasali cylindracea; perithecio ad tertium inferum androsticho adnato, subcylindrico, 90-100 × 35, apice umbonato-ostiolato, ad basim hypostomi et ad medium cingulo turgido transverso infuscato ornato, ostiolo atrato subbilabiato; paraphysibus paucis, bacillaribus, simplicibus, brevibus.

Hab. in Harpali sp. indet., Let-marefià, Scioa (Ragazzi).

187. **Laboulbenia Leonardi** Speg., Laboulb. Mus. ital., in Anal. Mus. 4179
Nac. Buenos Aires XXVI (1915) p. 484 fig. 27. — Eulaboulbenia, haplocytia, melanopsallia, malacochaeta, apodotheca, theletheca, parva, 225 μ alta, subpallida, brunnea; cellulis basalibus, androsticho gynostichoque annulis fuscis papilliferis transversis ornatis; perithecio subcylindraceo, 75 × 30, levi, grosse fusceque biannulato, apice breviter umbonato; paraphysibus 3-5, elongatis, subhyalinis, simplicibus, 150-200 μ longis.

Hab. in Megalonycho acanthuro, Bolama, Guinea Insitanica (L. Fea).

188. **Laboulbenia Diabroticae** Thaxt., Laboulb. on Chrysom. 1914, p. 38. 4180
Hab. in elytris Diabroticae Fairmairei et spp., Jalapa Mexico, Trinidad, Guatemala (Kellerman). — Perith. 100-140 × 20-28; sporidia 50 × 5; appendix longior 120-140; recept. longius usque ad cellulam insertionis 175-265 × 35; long. tot. ad apicem perithecii 300-390 μ (Uncinella).

— * **L. Boggiani** Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. Buenos 4181
Aires XXVI (1915) p. 505 fig. 45. — (Uncinella). Parvula, 150-200 μ alta, fuscula, receptaculo pallido subcylindraceo; androsticho unicellulari obconico; perithecio conoideo subfusoideo, atrato, 90 × 30; paraphysibus numerosis, simplicibus, nigris, rigidis, apice acutis abrupteque uncinato-incurvis, 60-70 μ longis.

Hab. in Diabrotica Kirschi, Puerto 14 de Mayo, Chaco (G. Boggiani) — A typo recedit apicibus paraphysarum semper recurvis acutisque, genus proprium novum, *Phachomyceti* affine, constituere digna (Uncinella).

189. **Laboulbenia variabilis** Thaxt., Monogr. Lab. I, p. 351.—* **L. clivi-** 4182
nicola Speg., Rev. Lab. Arg. 1917 p. 560, *L. pallescens* Speg. Contr. Lab. Arg. n. 50 p. 56 (non Thaxt.). — Zigolaboulbenia, pleocytia, apsallia, tota fusco-olivacea, psallio cellulis pluribus verticalibus collateralibus submajusculis substituto, paraphysopodio andropodioque bothryose proliferantibus, paraphysibus chlorinis densis filiformibus elongatis, perithecio inflatulo androsticho ad medium usque et ultra adnato, vix umbonato, hypostomo non v. vix infuscato, ostiolo leniter obliquo, labiis pallidioribus rotundatis, antico conspicue minore.

Hab. in toto corpore Ardistomis Arechavaleta, in ins. Santiago, La Plata — Perith. alt. tot. 110-14 × 60-75; alt. tot. 400-500 μ.

— * **L. eumetabola** Speg., l. c. p. 561 fig. 29 c. — Zigolaboulbenia, pleocytia, apsallia, *L. variabili* Thaxt. affinis sed septo 8. semper obliquo, cellulis III et VI brevibus inaequalibus et praecipue cellulis I et II hyalinis nec non colore atro fere nigro opacoque, perithecii gynostichi ac saepe totius androstichi distinctissima. 41

Hab. in elytris Carabidi spec. (Platyni?), Montevideo.— Perith. 150-175 × 60-75; alt. tot. 400-500.

— * **L. pachythelica** Speg., Rev. Lab. Arg. 1917, p. 562. — *L. proliferans* Speg., Contr. Lab. Arg. p. 57 fig. 63 (non Thaxt.). — Zigolaboulbenia, pleocytia, apsallia, obscure rufo-fusca dense obsoleteque subpapillosa, receptaculo superne opaco, perithecio erecto saepius lineis 4 longitudinalibus rectis notato, apice abrupte crasse breviterque nigro-umbonato, ostioli cellulis proliferantibus numerosis subopacis, paraphysibus copiosis fabrica longitudine nec non colore maxime ludentibus. 41

Hab. in elytris Hypolithi puberuli, Bonpland Misiones, Arg. — Perith. 150-175 × 60-75; alt. tot. 400-500 μ.

190. **Laboulbenia gibbulosa** Speg., Laboulb. ital. II, in Anal. Mus. Nac. Buenos Aires XXVII (1915), p. 55, fig. 20. — Zygolaboulbenia. Magnitudine sat ludens, 200-400 μ alta, saepius valde infuscata; stipite elongato, fusoideo, 100-300 × 20-25, ad septum primum incrassato, fumoso; androsticho gynostichoque adnatis, atris, opacis; psallio nigro parum perspicuo; paraphysopodio ac antheridiophoro pallidis, crassis, subglobosis; paraphysibus brevibus, copiosis, penicillatim congestis; peritheciis conoideo-ellipsoideis, 80-90 × 30-40, atris, subopacis, ad medium marginis ventralis valide gibbosis, ostiolo rotundato, labiis parum inaequalibus, subhyalinis. 41

Hab. in Agono ? ruficorne, prope Coneglanum, Ven., It. bor., et verisimiliter etiam in Argentina.

191. **Laboulbenia mirabilis** Speg., Laboulb. ital. II, in Anal. Mus. Nac. Buenos Aires XXVII p. 56 (1915) fig. 22. — Laboulbeniopsis. Mediocris, 400 μ alta, plus minusve infuscata, cellulis prima et secunda pallidis genu septi primarii saepius tumidulo, cellula septima lineari aegerrime perspicua, sexta minuta trigona; perithecio androsticho normali ultra medium adnato, 125 × 35-40, apice bilabiato, labio ventrali concavo, dorsali capitato ostiolifero; paraphysopodio, psallio majusculo insidente, cylindraceo, cellulis binis superpositis fuscis coronato; antheridiopodio hyalino, majusculo, paraphysibus geminis, achrois, subhorizontaliter evolutis, crassis, multiarticulatis, 200 × 10 ornato. 41

Hab. in Bembidio nitidulo, prope Coneglanum Ven., Ital. bor. — Videtur forma anomala *L. paradoxae* Speg., quae quoque cum *L. truncata* Thaxt. et *L. perpendiculari* Thaxt. ad subg. *Laboulbeniopsis* (cellulis gynostichi sexta et septima plus minusve abortivis vel deficientibus) spectat.

192. **Laboulbenia paradoxa** Speg., Laboulb. ital. II, in Anal. Mus. Nac. Buenos Aires XXVII (1915) p. 58, fig. 23. — Laboulbeniopsis. Haplocytia, melanopsallia, apodotheca, malacochaeta, monomastiga, parvula, 175 μ alta, tota fusca; receptaculo conoideo, androsticho majusculo, regularibus; psallio nigro latissimo, gynosticho valde abbreviato perithecioque ultra medium androsticho adnatis; cellulis secunda, tertia, quarta et sexta saepius longitrorsum rugulosis septima carente; perithecio conoideo-elongato, 90 × 35, umbone subcapitato praedito, ostiolo subdorsali crasseque bilabiato; paraphysopodio maximo, conico, 75-90 μ alto, in flagello 2-3 articulato, gracili producto; antheridopodio subhyalino, paraphyse maxima, percrassa, 110-125 × 15-20, clavata, 5-mera, concolore ornato. 1187

Hab. in Bembidio nitidulo, prope Coneglanum, Ven., Ital. bor. — Affinis *L. truncatae* Thaxt.

193. **Laboulbenia Acupalpi** Speg., Laboulb. Mus. ital., in Anal. Mus. Nac. Buenos Aires, XXVI (1915) p. 458 fig. 4. — Zygolaboulbenia. Haplocytia, melanopsallia, apodotheca, malacochaeta, oligomastiga, tota pallida, 150 μ alta; perithecio subcylindraceo, 70-80 × 30-35, medio lateris ventralis plus minusve gibboso, gibba et ostiolo saepius infuscatis; cellula basali cylindracea, gracili, brevi, hyalina, praebasali brevi, crassa, subhyalina et obsolete minuteque maculata; ostiolo obliquo ventrali; paraphysibus 50-75 × 5. 4188

Hab. in Acupalpo elegante, Neusiedler See, Hungaria.

— * **L. cryptotheca** Speg., Lab. Arg. p. 618, fig. 148 b. — Eulaboulbenia, melanopsallia, apodotheca, hemisyncarpa, malacochaeta, oligomastiga; mediocris subhyalina, perithecio saepius leniter fumoso, latere ventrali ad hypostomi basin nec non ad medium eximie gibbuloso-angulato, receptaculo elongato normali, paraphysibus 1-3, andropodio minuto pauci-antheridiato. 4189

Hab. frequens in elytris Ochtozeli bicoloris, Sta Catalina B. A., La Plata. — Perith. 65-75 × 25-28; alt. tot. 175-200 μ.

194. **Laboulbenia patrata** Speg., Laboulb. ital. II, in Anal. Mus. Nac. Buenos Aires XXVII (1915) p. 59 fig. 24. — Laboulbeniopsis. Haplocytia, melanopsallia, apodotheca, malacochaeta, oligomastiga, parva, 175-200 μ alta, castaneo-fusca; receptaculo pallido, obconico- 4190

elongato; androsticho normali, septo tertio et quarto intus conniventibus; gynosticho cellula septima deficiente; paraphysopodio maximo hemisphaerico, axi paraphysario primario 2-3-cellulari, septis nigris opacis, cellula suprema maxima, clavata, intus incurva; antheridiopodio cuneiformi, parvo, antheridio solitario sessili donato; perithecio normali, ovoideo-oblongo, 85 × 35-48.

Hab. in Elateridis minutis, prope Coneglanum, Ven., It. bor.

PEYERIMHOFFIELLA Maire, Bull. Soc. Hist. Nat. Afrique du Nord, t. VII, 1916, p. 18 (a cl. entomologo gallico P. de Peyerimhoff). — Receptaculo bicellulari; appendicis liberae filiformis cellula subbasilari vel rarius basilari ramulum antheridiferum simplicem vel breviter ramosum gerente.

1. **Peyerimhoffiella elegans** Maire, l. c., tab. I fig. 5-9. — Minor (80-115 μ alta) crasse tunicata, dilutissime brunneola. Receptaculo bicellulari 20-25 μ longo, cellulae basalis pede atrato. Appendice subhyalino, longissimo (usque ad 200 μ), multiseptato, in cellula subbasali v. rarius in basali ramulum antheridialem simplicem v. breviter ramosum gerente; antheridiis acrogenis simplicibus. Perithecii maturi dilute brunnei, pedicello brevi (30-38 longo), crasso, bicellulari; perithecio (45-58 × 18-22) asymmetrico, subfusiformi, apice in collum attenuato; ostiolo cellulis 4 apice in papillas brevissimas desinentibus cincto. Ascosporis hyalinis, laevibus fusiformibus, utrimque acutis, inaequaliter 1-septatis; cellula superiore inferiore triplo longiore. 4191

Hab. in membris et in abdomine Brachyglutae Reichei pr. Dely-Ibrahim Algeriae (De Borde) et B. dichroae in monte Mouzaïa Atlantis Algerici (De Peyerimhoff), Africae bor.

PSELAPHIDOMYCES Speg., Lab. Arg. p. 662 (1917). — Laboulbenieus; receptaculum bicellulare; cellula supera dorso in androsticho simplici polymero, articulis superis e latere interne ad angulum superum antheridia conoidea parva gerentibus, ventre in pedicello polymero apice perithecigero producta; cellula ascogenica solitaria; sporis acicularibus geminatis excentrice 1-septatis achrois. — Gen. *Stichomyces* Thaxt. affinis, pedicello peritheciali polymero distinctus.

1. **Pselaphidomyces Pselapti** Speg., l. c. p. 662, fig. 190. — Pusillus, totus fere hyalinus, margine dorsali androstichi simplicis saepe anguste nigrescente excepto; perithecio lanceolato subacutiusculo, pedicello 5-10-mero fulto. 4192

Hab. in partibus dorsalibus Pselapti tuberculiferi, in nidis Attae Lundi, La Plata, Argentina. — Perith. 50-55 × 15-17; sporidia 15-18 × 2.

RHACHOMYCES Thaxt. 1894. — Syll. XI p. 454, XIV p. 735, XVI p. 690, XVII p. 917, XXII p. 15 (= *Acanthomyces* Thaxter 1892, nom. praeocc.).

1. **Rhachomyces argentinus** Thaxt., Proc. Amer. Acad. 1912, p. 208; Speg., Lab. Arg., fig. 191. 4193

Hab. in elytris et artubus Agae argentinae, Jujuy Argent. boreal. — Perith. 120 × 40-43; appendix longior 95 µ; long. totalis ad apicem perithecii 310-425.

2. **Rhachomyces stipitatus** Thaxt. — Sacc., Syll. XVI p. 691. — var. **pallidus** Maire, Bull. Soc. Hist. nat. Afrique du Nord, IV n. 9., p. 3 tab. II fig. 3-5 (1912). — A typo differt praecipue perithecio hyalino et appendicibus obscuris parcis. 4194

Hab. praecipue ad pedes Aphaenopsidis Iblis, in spelunca Ifri-Maareb in Djurdjura, Algeria, Africa bor. (P. DE PEYERIMHOFF).

3. **Rhachomyces Aphaenopsis** Thaxt. - Sacc., Syll. XXII p. 15. — var. **Jeanneli** Cépède et Picard, Bull. Soc. Mycol. Fr. 1913, p. 555. — *Rhach. Jeanneli* Cépède et Picard, Bull. Scient. France Belgique t. 42., 1909, p. 253, ut species. — A *Kh. Aphaenopsis* Thaxt. differt cellulis receptaculi parum minoribus appendicibus contra multo longioribus, fere e basi omnino nigris, semper congestis, appendicibus specialibus brevibus apice hyalinis peritheciorum verisimiliter nullis; receptaculo 180-200 µ longo; appendicibus 1080-1120 µ long. nec 350 µ. 4195

Hab. in Aphaenopside Jeanneli, in spelunca Oxibar prope Camoucihique (Tardetz-Sorkolus) in Pyrenaeis inf., et Aph. bucephala, in spelunca Lingué prope Moulis, St. Girons Ariège, Gallia (Coll. JEANNEL).

4. **Rhachomyces orientalis** Thaxt., Proc. Amer. Acad. 1915, p. 49. 4196

Hab. in trochanteribus insecti Tachyi affinis, Samarang Java.— Perith. 100-116 × 25; recept. 60-80 × 22; appendices longiores 110 µ, long. tot. ad apicem perithecii 160-200 µ.

5. **Rhachomyces Peyerimhoffii** Maire, Bull. Soc. Hist. nat. Afrique du Nord, IV, n. 9, p. 3 tab. II fig. 1-2 (1912). — Perithecio maturo rufo-brunneo, subfusiformi, 120-200 × 50-70, sessili v. subsessili; ascosporis 60-70 × 5, hyalinis vel dilutissime brunneolis, laevibus, 4197

apice vagina mucosa dilatata cucullatis, ad $^1/_3$ infer. uniseptatis. Receptaculo 225-400 μ longo, rufo-brunneo; axis primarii vix ultra perithecii basim protracti v. proliferi, simplices v. ramosi, cellulis 14-18 stigmatiferis; axis secundarii cellulis conoideis 2-4 septatis, appendices antheridioque immixto gerentibus; appendicibus fusco-atris, subopacis, multiseptatis uniformibus usque 400 μ long.; antheridiis unciformibus, pediculo unicellulari suffultis.

Hab. in Trechopside Lapiei, in « tessereft » Djebel-Haïzer, Africa bor.

6. **Rhachomyces Fagniezi** Picard, Bull. Scient. France Belgique t. 50., 1916-1917, p. 457. — Perithecio hyalino v. vix pallide flavescenti, receptaculo subaequante v. plerumque longiore (185-195 μ), anguste fusoideo v. lanceolato apice acutato, pedicello brevi suffulto; receptaculo hyalino distincte incurvato, 130-170 μ longo; axe primario e parte basali insertionem perithecii attingentem, et parte distali libera efformato; altero e cellulis circ. 10, magnis, magis longis quam latis septo contractulis constituto, altero a 8-10 cell. parvis aequalibus quadratis, omnibus longe appendiculatis (app. 210-230 μ usque long.); axe secundario e cellulis minoribus efformato breviter appendiculatis (app. 100-150 μ long.); appendicibus omnibus brunneis, primariis apice incurvatis, secundariis rectis; antheridiis in axe secundario ortis, brunneis, fortiter elongatis collo elongato abrupte incurvato terminatis, 45 μ long.; sporis 35 μ long. Totus fungus 320-330 μ longo. 4198

Hab. in Zuphio Schelkownikowi, ex Caucaso (Ch. Fagniez).

SCAPHIDIOMYCES Thaxt., Proc. Amer. Acad. 1912, p. 209 — Axis e receptaculo primario bicellulari constans; cellula subbasilaris gerens apice appendicem primariam ramosam et inferius receptaculum secundarium ex inde finita serie cellularum, perithecia pedicellata ramulosque alterne gerenti formatum. Antheridia simplicia in ramulis brevibus acrogena. Perithecia normalia.

1. **Scaphidiomyces Baeocerae** Thaxt., Proc. Amer. Acad. 1912, p. 209. Speg., Lab. Arg., fig. 9. 4199

Hab. in elytra speciei indescriptae Baeocerae, ad Corticia et ligna uda, Llavallol et Sta Catalina Argentina.

CLEMATOMYCES Thaxt. — Syll. XXI p. 692.

1. **Clematomyces argentinensis** Speg., Lab. Arg. p. 480, fig. 23.— Maju- 4200

sculus, hemisphaericus, plus minusve melleus, receptaculo basi alterne sympodico, sterili infuscato superne subtrichotomico, ramis non parenchymaticis, mediano gracili antheridifero, lateralibus crassioribus peritheciferis omnibus lateraliter filamentis longis tenuibusque sympodice ramosis coronatis; peritheciis obclavato-conoideis, obscure melleis, in ostiolo mediocri obtusiusculo elongato attenuatis.

Hab. in artib. ant. Pinophili suffusi, Santa Catalina B. A., Argent. — Alt. tot. 350-400 μ; perith. 135-140 × 35-40 (cum pede).

COMPSOMYCES Thaxt. — Syll. XI p. 450.

1. **Compsomyces platensis** Speg., Lab. Arg. p. 483, fig. 25. — Mediocris, hyalinus, perithecio excepto fumoso. Receptaculum dimerum breve, cellula subbasali e latere receptaculum secundarium fulcente, superne cellulam tertiam sustinente; cellula tertia receptaculis tertiariis binis sterilibus nec non, inter illa, pedicello perithecigero praedita; receptacula secundaria et tertiaria 1-mera pleurogene ascogonii rudimento donata atque superne appendice 4-mera apice paraphysibus saepius geminis ramulosis coronata; perithecium elongato-conoideum vertice obtuse obsolete subcapitulato, deorsum pedicello elongato cylindraceo imposito. 4201

Hab. in elytris minuto Staphylin. cujusdam (*Escafidiano*), in ins. Santiago Argent. — Alt. tot. 230-275 μ; perith. 90-100 × 35-40 (sine ped.).

COCHLYIOMYCES Speg., Laboulb. Argent. in Anal. Mus. Nac. Buenos Aires XXIII p. 180 (1912) c. ic. — Dioicus? Receptaculum monostiche multicellulare, cellulis a basi ad apicem sensim latioribus; cellula apicalis in appendice sterili filiformi producta; cellula praecapicalis axim secundarium sustinens, cujus cellula basali e latere interno perithecigera. Perithecium cylindraceum torulosum. Antheridia adhuc ignota. — Genus *Ecteinomyces* Thaxt. accedens sed certe satis superque distinctum.

1. **Cochlyiomyces argentinensis** Speg., l. cit., c. ic.— Characteres generis, 300-400 μ alt. receptaculo oblique 12-15-cellulari, superne 25-30 μ lato, perithecio 160 × 35, toto plus minusve intense melleo; sporidiis anguste lanceolatis, curvulis, hyalinis, superne acutioribus ad tertium inferum septatis, 40 × 5. 4202

Hab. in Trecho laevigato, La Plata, Argentina.

AUTOPHAGOMYCES Thaxt., Proc. Amer. Acad. 1912, p. 172. — Individua mascula cellulae basilari et pedi individui feminei adhaerentia, ex pluribus cellulis superpositis formata et gerentia acropleurogena 1-plura antheridia majuscula, phialiformia — Individua feminea constans ex unica cellula basilari quae perithecii cellulam pedunc. gerit; cellula ascogena unica; sporidia 1-septata.

1. **Autophagomyces platensis** Thaxt., Proc. Amer. Acad. 1912, p. 172. 4203
Hab. in elytris Tomoderi forticornis, Llavallol Argent. — Individuo masc. antheridia 1-3, 25 μ longa. Long. tot. ad apicem antheridii 58-63 × 5. — Indiv. feminea: perith. 106 × 28-32, cellula pedunc. 14-18 × 10-14; cellula basilari 9 × 10,5, dempto pede.

2. **Autophagomyces nigripes** Thaxt., Proc. Amer. Acad. 1912, p. 173.— 4204
Indiv. masc.: antheridia 1-2, 26 μ longa; longit. tot. ad apicem antheridii 60-70 × 3,5. Indiv. feminea: perith. 106 × 26; cellula pedunc. 26-28 × 16; cellula basilaris sine pede 26 × 9.
Hab. in superf. inter. abdominis Tomoderi forticornis, Argentina.

CRYPTANDROMYCES Thaxt., Proc. Amer. Acad. 1912, p. 173. — Receptaculum ex binis cellulis suprapositis constans; cellula sup. perithecium singulum et appendicem gerens; appendix e cellularum serie unica non ramosa formata; sterili plures cellulae consecutivae, initio tamquam antheridiales cellulae funguntur; ex harum parietibus pertusis cellulae spermaticae effunduntur; perithecia normalia unicâ cellulâ ascogenâ praedita.

1. **Cryptandromyces Peyerimhoffii** R. Maire, Bull. Soc. Hist. Nat. A- 4205
frique du Nord, t. 11., 1920, Extr. p. 18, tab. I fig. 11-12. — Receptaculo bicellulari, subhyalino v. inferne melleo; cellula basali elongata, ungue subgloboso nigro hyalino-punctato, basi hyalino-apiculato, praedita; cellula subbasali multo minore, subtriangulari septo valde obliquo lateraliter dejecta, appendicem masculam et perithecii pedicellum gerenti. Appendice mascula antheridiis, ut videtur, carenti, in axi, cellulae basali evoluta, tricellulari; cellula inferiore subhyalina, subtriangulari; eellula media subquadrangulari, brunnea, septo superiore nigricanti; cellula terminali brunnea cylindro-conica, apice, apiculo acuto praedita. Perithecii pedicello, subhyalino, breviusculo, supra basim valde constricto; cellulis basalibus parvis, subtriangularibus; perithecio incurvo, asymmetrico, melleo, parum inflato, satis elongato, in rostrum validum, brevem,

in facie interna et externa fuscescentem, vix attenuato; ostioli rotundati labiis hyalinis prominulis; cellula ascogenica unica; ascis 4-sporis; ascosporae 1-septatae, cellula superiore inferiore subduplo majore. — Totus fungus 125-135 μ alt.

Hab. in Arthrolipe obscuro var. Sanctae-Balmae Ab., in Mauretania, Africa bor.

2. **Cryptandromyces geniculatus** Thaxt., Proc. Amer. Acad. 1912, p. 174. 4206
Speg., Lab. Arg., fig. 45.

Hab. in elytris etc. Connophri nov. sp., Temperley et La Plata Argent. — Sporidia majuscula 28 × 3,5; perith. 50-70 × 25-30; cellula pedunc. 20 26 × 8; receptacul. 26-35 × 12-16; appendix 50 × 9, longior 130 μ.

3. **Cryptandromyces javanus** Thaxt., Proc. Amer. Acad. 1915, p. 36. 4207

Hab. in insecto ex Scydmaenidis stirpe, Java (Rouyer).— Perith. 60-70 × 23-25, pes 20-10 μ; appendix incl. pede 30-38; series antheridialis 28 μ; receptac. 35-40; long. tot. ad apicem perithecii 100-120 μ.

4. **Cryptandromyces subgaleatus** Thaxt., Proc. Amer. Acad. 1915, p. 37. 4208

Hab. in elytra insecti Scydmaeno affinis, Samarang, Java. — Perith. 86 × 20, incluso pede 25 × 8; appendix 215 × 8; ramulus antheridialis 30 μ; receptac. 20 × 10; long. tot. ad apicem perithecii 125 μ.

CUCUJOMYCES Speg., Lab. Arg., 1917, p. 506.— Laboulbeniineus peyritschiellaceus, Monoicomyceteis affinis; monoicus, receptaculum flabellatum, cellula basali obovata pluribus subbasalibus monostiche cincta efformatum: cellulae basales, altera intermedia interposita, androstichum et gynostichum geminato, extimae androstichum v. ramulum sterile fulcentes; androstichum e cellulis monostiche superpositis, superis et supremis paraphysatis, constitutum; antheridia solitaria cellula apicali androstichi inclusa, poro parvo inter paraphyses aperta; gynostichum e cellula pedicellari una basi nigro-ungulata; apice abrupte perithecium proferente, constans; perithecium plus minusve infuscatum cylindricum v. ovatum, saepius, transverse grosse denseque sulcatum, cellula basilari segmentoidea parum perspicua, nucleo ascogonico solitario, sporis linearibus excentrice 1-septatis hyalinis mucoso vaginatis in ascis subfusoideis geminatis.

1. **Cucujomyces cylindrocarpus** Speg., Lab. Arg. p. 507, fig. 46. — Cellulae subbasales 7-9; androsticha subfusoideo-cylindracea 8-12 mera 4209

apice parce breviterque paraphysata torulosa, septis crassis nigris; pedicelli peritheciales cylindracei ima basi breviter nigri ceterum hyalini utrinque modice attenuati, perithecia subanguste cylindracea basi nigra ceterum dense transverseque nigro-sulcata, apice conoidea ostiolo obtuso coronata.

Hab. in thorace Brontis chilensis, pr. lacum Nahuel-Huapi Neuquen, ex Museo Platensi. — Alt. tot. 300-350 μ; perith. 150 × 15 (sine ped.).

2. **Cucujomyces elegans** Speg., Lab. Arg. p. 508, fig. 47. — Cellulae 4210
subbasales paucae, saepius 3; androsticha subfusoidea sursum longe attenuata 5-6-mera subhyalina parcissime paraphysata; perithecia ovato-pyriformia fumosa transverse dense nigro-sulcata superne ostiolo conico obtusiusculo coronata, postice abrupte truncata atque pedicello hyalino recto cylindraceo basi non v. vix incrassato nigro-ungulato suffulta.

Hab. in elytris Brontis chilensis, pr. lacum Nahuel-Huapi, Neuquen, ex Mus. Platensi Argent. — Alt. tot. 350 400; perith. 60-75 × 40-45 (sine ped.), pedic. 175-200 × 15-18.

3. **Cucujomyces melanopus** Speg., Lab. Argent. 510, fig. 48. — Cellu- 4211
lae basales paucae, saepius 3 parum perspicuae, androstichis subobclavato-fusoideis 8-10-meris hyalinis superne parce-tenuiterque comatis, pedicellis perithecialibus subcylindraceis sursum vix ampliatis deorsum elliptico-bulbosis, nigris opacis, bulbo excepto una basi tamen nigro-ungulato, perithecio elliptico-subovato pallido sulcis crassis nigris transversis notato ostiolo conico obtuso laevi coronato.

Hab. in margine abdominis Brontis chilensis, pr. lacum Nahuel-Huapi, Neuquen ex Mus. Platensi Argent. — Alt. tot. 300-325; perith. 75-85 × 18-22; ped. 150-175 × 10-30.

4. **Cucujomyces bilobatus** Thaxter, Proc. Amer. Ac. of Sc. 54., 1918, 4212
p. 227. — Cellula basilari uniformiter obscure brunnea, distali concava et simulate biloba, cellula basilari perithecii hyalina subventricosa, parietibus fortiter incrassatis praedita. Perithecium: pedicello 50 × 15, coeterum cellula basali inclusa 54 × 22; sporis 25 × 2,8; appendicibus maximis 50 μ. Latitudo cellulae basilaris 18-22 μ, axis receptaculi secundarii ex apice 60 μ long.

Hab. in elytra? Cryptophagi sp., Aukland, Nova Zelandia.

5. **Cucujomyces Diplocoeli** Thaxter, Proc. Amer. Ac. of Sc. 54., 1918, 4213
p. 276. — Cellula basali obscure brunnea translucida; pedicello pe-

rithecii opaco ; antheridio terminali simplici. Perithecium : appendix 100-200 × 7, basi bulboso usque 18 μ cr., cellulae regione basilari 14 × 18 ; perithecium proprium 50-56 × 20-28 ; sporis 30 × 3 ; appendicibus 35-70 × 5.

Hab. in elytra Diplocoeli sp., Corral, Chile, America austr. — *C. elegantissimo* et *C. melanopo* proximus.

6. **Cucujomyces stipatus** Thaxter, Proc. Amer. Ac. of Sc. 54., 1918, 4214
p. 224. — Cellula basali magis longa quam lata obscure brunnescenti ; receptaculo ut in *Teratomyces*. Perithecio area opaca inclusa 100-130 × 18 ; sporis circ. 35 × 3 ; appendicibus longioribus e apice ramulorum 50-70 × 5 ; totus fungus 140-175 μ long. ; receptaculo circ. 50 × 28 pede incluso.

Hab. in elytra Hyliotae Chilensis, Corral Chile, America austr. — Proximus *C. cylindrocarpi*.

7. **Cucujomyces intermedius** Thaxter, Proc. Amer. Ac. of Sc., 54., 1918, 1215
p. 223. — Cellula basali leniter suffusa, pedicello purpurascenti, saepe obscuro v. in parte superiori omnino opaco. Perithecio 38-45 × 16-18 ; pedicello 175-300 × 12 ; ramulis longioribus 100-125 μ long. ; cellulis latioribus ramulorum usque 8,5 × 7.

Hab. in Hyliota Chilensis, Corral Chile, Amer. austr.— *C. eleganti* Speg. proximum.

8. **Cucujomyces curtipes** Thaxt., Proc. Amer. Ac. of Sc. 54., 1918, 4216
p. 228. — Cellula basilari brunneo tincta, magis lata quam longa; pedicello perithecii abbreviato ; perithecio subinflato uniformiter obscure brunneo. Pedicellum perithecii 18 × 10 ; corpus, inclusa regione cellulae basilaris, 60-66 × 22-28 ; sporis 35 × 3,5. Totus fungus e apice perithecii 95-105 μ long. ; ramis primariis 50 μ long. ; longitudo receptaculi secundarii e apice ramulis terminalibus 90 μ.

Hab. in elytra Liodes sp., Corral Chile, America austr. — *C. Diplocoeli* proximus.

SCELOPHOROMYCES Thaxt., Proc. Amer. Acad. 1912, p. 210. — Receptaculum primarium ex cellula basilari et subbasilari formatum, cellula subbasilaris ramulos laterales pluricellulares gerens et perithecio primario terminata, cellulae, subbasilari cellulae superpositae ramulos copiosos introrsum apiceque gerentes; perithecia secundaria e pede communi inferius orientia. Antheridia (?) simplicia et in ramulis inferioribus acrogena.

1. **Scelophoromyces osorianus** Thaxt., l. c. p. 211. 4217

Hab. in abdomine et elytra Osorii sexpunctati, Pa-

lermo et Ins. Santiago La Plata, nec non in Osorii majuscula specie in Amazonia (Mann). — Perithecia 95-110 × 30-40; perithecii rami 25-120, cum cellulis basilaribus 130-250 μ long., regio basilaris 20-40 × 25-30; long. totalis ad apicem appendicis longioris 400 μ, sustentaculum 100-275 μ.

Laboulbeniomycetae incertae sedis
v. omnino dubiae et ad Phycomycetes etiam vergentes

CHANTRANSIOPSIS R. Thaxt., Bot. Gaz. LXIII (1914) p. 246. — (Etym. *Chantransia* ob habitum hujus algae). Entomophila. Filamenta firma, elastica, persistentia, crasse tunicata, hyalina, septata, varie caespitulosa, basi atra opaca (entomogenea) praedita, varie ramosa. Conidia solitarie acrogena, ovato-oblonga, basi truncata, continua, hyalina. — Nonnullae species habitus etiam Dematiaceo donatae.

1. **Chantransiopsis decumbens** Thaxt., l. c. p. 248, t. XVIII p. 19-21. — 4218
Divergens, decumbens, laxa, parce ramosa, hyalina; hyphis sursum tenuatis, 230-350 × 6, subspiralibus; conidiis oblongo-ellipsoideis v. subpiriformibus, 30-35 × 9-11.

Hab. in parte inf. insecti ex Staphylinideis, Malang, Java (Royer). — Habitu procumbente imprimis dignoscenda species.

2. **Chantransiopsis stipata** Thaxt., l. c. p. 248, t. XVIII fig. 17-18. — 4219
Hyphis dense confertis, erectis v. vix inflexis, rigidis, dense septatis, vulgo basi 1-ramosis e basi nigra entomogena oriundis, 110 × 5; conidiis tereti-oblongatis, apice rotundatis, basi truncatis, 25-32 × 8.

Hab. in parte inf. insecti Staphylinoidei affinis Tachino, Java (Royer). — Hyphis subrectis stipatis et conidiis angustis distincta species.

3. **Chantransiopsis Xantholini** Thaxt., l. c. p. 249, t. XVIII fig. 14-16. — 4220
Hyphis densiuscule caespitosis, copiose ramosis, rectis v. leniter flexis, 70-175 × 5-7, e basi nigra opaca entomogena oriundis; conidiis minusculis ovoideis v. oblongis, apice rotundatis, 10-18 × 5-6.

Hab. infer. superf. thoracis Xantholini obsidiami, Fresh Pond, Cambridge Mass., Amer. bor. (Thaxter).

4. **Chantransiopsis (Asteronycha) platensis** Spegazzini, Obs. microbiol. 4221
in An. Soc. Cient. Argentina t. 85., 1918, Extr. p. 11, cum icon. — Cornulus subdiscoideus, polymerus, semilenticularis (8-12 μ diam.), cellula centrali majore atra opaca, marginalibus saepius 8 radiantibus minoribus (5 μ cr.) pallidioribusque cincta; hyphis ex cellulis

marginalibus, totis v. pro parte, enascentibus, 100-200 × 5-6, saepius unilateralibus, simplicibus v. parcissime subparalleleque ramosis, caudae cometae cujusdam subsimilibus, 10-20-meris, ad septa non v. vix constrictis, articulo supremo ex penultimo protrudente (Empusarum more) ac mox deciduo.

Hab. ad corporem Belonuchi hemorrhoidalis et Acaridorum, in cortice putrescenti Manihot carthagenensis, Santa Catalina Rep. Argentina, America austr.

5. **Chantransiopsis (Tetrameronycha) bonaerensis** Spegazzini, Obs. microbiol., in An. Soc. Cient. Argentina, t. 85., 1918, Extr. p. 9, cum icon. — Cornulus fuligineus subopacus 3-septatus e fronte ellipticus 30-35 μ latus, e latere dimidiato-lenticularis, 18-20 μ latus, superne sub apice lateraliter dehiscens ac hypharum fasciculum emittens; hyphis (10-30) filiformibus hyalinis 150-200 × 5-6 e basi confluentibus antice subpenicillatim expansis, saepius simplicibus 5-12 septatis, ad septa suprema tantum v. vix constrictis, articulus earum apicalis ex subapicali protrudens et caducus 16-20 × 6-8 (conidia v. sporae?). 4222

Hab. ad corporem Staphylinorum (Eleusis nigerrimus, Xantholinus subtilis, Lispinus tenellus), Dipteri Dilocapodidei cujusdam, in ramis Phytolaccae dioicae vigenti, Santa Catalina et La Plata, Rep. Argentina, America austr.

AMPHOROMORPHA Thaxt., Bot. Gaz. LVIII (1914) p. 249. — (Etym. *amphora* et *morphe* forma). Entomophila, e cellulis duabus involucro communi firmo obtectis constans, involucro apice perforato; sporae globoso-angulosae, in cellula superiori evolutae et per foramen involucri exeuntes. Stirps dubia, basi denigrata insectis inserta. Genus ambiguum, caracteres Chytridiacearum et Laboulbeniacearum ostendens.

1. **Amphoromorpha entomophila** Thaxt., l. c. p. 251, t. XIX f. 26-28.— Pallide flavo-brunnea, translucens, amphoriformis, in rostellum breve obtusum apicale producta, tota 110-130 μ longa, corpore 70-105 × 28-31, rostello 14-17 × 7,5-8, pedicello 35 × 17; sporis conglomeratis, 4 μ circ. diam. 4223

Hab. in setulis Diochi conicollis, Manilla Ins. Philipp., ubi aliae formae magis imperfectae occurrunt in Staphilinidis; cfr. l. c. t. XIX f. 29-31.

2. **Amphoromorpha blattina** Thaxter, Bot. Gazette 69., 1920, p. 20, 4224

tab. IV fig. 44. — Flavescens, sessilis pede lato obscuro praedita; forma elongato-ovoidea, apicem versus parum latiori, apice rotundato; sporis 50-100, circ. 5 μ diam.; sporogonio 55-70 × 18-20, pede 18-22 × 18, e fronte viso.

Hab. ad antennas Blattiae cujusdam ignotae, Grand Etang Grenada. — *Amph. mediae* proxima.

AMPHOROPSIS Spegazzini, Obs. microbiol. in An. Soc. Cient. Argentina t. 85., 1918, Extr. p. 4. — Perithecium plus minusve ellipsoideum sursum rotundatum v. vix obsolete umbonatum, deorsum cuneatum sessile v. pedicellatum ungue valido nigro substrato adfixo, intus omnino sporis repletum, basi sterili plane nulla; sporae ameboideae e mutua pressione angulosae saepius octonae. — Ab *Amphoromorpha* Thaxt., differt peritheciis apice obtusis et basi intus sterili.

1. **Amphoropsis minuta** Spegazzini, l. c., fig. 1. — Peritheciis subellip- 4225
soideis apice obsolete umbonatis, deorsum breviter sed manifeste cuneato-pedicellatis (pedicellum cum ungue 10 × 5), laevibus, hyalinis, 45 × 10; sporis enucleatis.

Hab. ad tarsos et ungues parvi Histeri sp., in truncis putrescentibus Palmarum, La Plata Rep. Argentina, America austr.

2. **Amphoropsis subminuta** Spegazzini, l. c. Extr. p. 5, fig. 2. — Peri- 4226
theciis ellipsoideo-clavulatis (sine ungue 45-50 × 13), apice modice sed patenter umbonatis, deorsum cuneatis sed omnino sessilibus, levibus, hyalinis; sporis plerumque distincte uninucleatis.

Hab. ad pilos abdominis et ad ungues posteriores Echiasteris depressi et melanuri, La Plata Rep. Argentina, America austr.

3. **Amphoropsis media** Spegazzini, l. c. Extr. p. 5, fig. 3. — Peritheciis 4227
ex ellipsoideo-clavulatis, apice omnino exumbonatis, basi abrupte coarctatis et in pedicellum brevem sed eximie distinctum productis, levibus, hyalinis, 75 × 18-20; sporis majusculis, parce angulosis enucleatis.

Hab. ad pilos Clivinae longipennis, in ins. Santjago prope La Plata, America austr.

MYRIAPODOPHILA Spegazzini, Obs. microbiol., in An. Soc. Cient. Argentina t. 85., 1918, Extr. p. 5. — Perithecium lineare sursum sensim attenuatum, basi abrupte coarctatum atque in pedicellum tenuem ungue crasso suffultum productum, basi sterili nulla, sporis ameboideis angulosis.

1. **Myriapodophila argentinensis** Spegazzini, l. c., Extr. p. 6, fig. 4. — Tota hyalina; peritheciis subsigmoideis (75-125 × 12-16, absque ped. et ung.), levibus tenuiter tunicatis, pedicello geniculato-subhorizontali brevi tenui fultis; sporis majusculis angulosis, enucleatis. 4228

Hab. ad pilos et ungues parvae Scolopendrae sp. in ins. Santjago prope La Plata, Rep. Argentina, America austr.

THAXTERIOLA Spegazzini, Obs. microbiol., in An. Soc. Cient. Argentina t. 85., 1918, Extr. p. 6. — Corpus fusoideus-sublineare, sursum in rostrum elongatum rectum v. curvulum productum postice modice attenuatum, sessile v. breviter pedicellatum, ungue nigro bene evoluto suffultum; intus septis 2 transversis trimerum, articulum supremum sporis amoeboideis paucis monostichis repletum.

1. **Thaxteriola infuscata** Spegazzini, l. c., Extr. p. 7, fig. 5. — Parva, 40-45 × 4-5, fusco-plumbea, per aetatem saepius atra, rostro parum arcuato et pedicello brevissimo semper tamen subhyalinis, septis internis sat approximatis; sporis parvis, irregulariter cuboideis, hyalinis. 4229

Hab. frequens ad antennas Labiae minoris et Philonthi convexicollis, prope La Plata, nec non ad pilos Belonuchi haemorroidalis, Santa Catalina, Rep. Argentina, America austr.

2. **Thaxteriola subhyalina** Spegazzini, l. c. Extr. p. 7, fig. 6. — Tota et semper hyalina v. subhyalina, pusilla (20 × 3), rostro valde arcuato, septis internis sat remotis. 4230

Hab. ad marginem antennarum Aphodii granarii et lividi, prope La Plata, Rep. Argentina America austr.

3. **Thaxteriola nigromarginata** R. Thaxter, Bot. Gazette 69., 1920, p. 15, tab. IV fig. 37-38. — Subsigmoidea, basim et apicem versus hyalinis exceptis, pallide brunnescenti, versus medium macula nigra praedita, cellula basilari longitudine dimidium totius fungi aequante; totus fungus 62-68 μ long., 8-8,5 μ latus in parte latiori cellulae basilaris. 4231

Hab. ad pila Staphylinidearum, Samarang Java.

ENDOSPORELLA R. Thaxter, Bot. Gazette, 69., 1920, p. 16 (Etym. *endos* intus et *spora*). — Axis e quatuor cellulis superpositis efformatum, basilari infra pedicelliformi angustata, terminali mucrone elongato praedita, intus sporidia e basi efformantia uniseriata, apice exeuntia.

1. **Endosporella Diopsidis** Thaxter, l. c. tab. IV fig. 39-41. — Pede parvo, 4232
nigro acuminato; cellula basali infra angustata et hyalina oblique brunneo-nigrescenti; cellula secunda et tertia brevioribus subaequalibus v. superiori parum majori, terminali seu sporogonio longiori dimidium longitudinis totius fungi quandoque subaequante nigro maculato, apice mucrone deciduo et ostiolo hyalino aperta; totus fungus 100-150 × 10-12, sporogonium 50-60 × 10-12.

Hab. ad crura Diopsidis sp., Kamerun Africa occ. — Gen. *Thaxteriolae* affine.

LABOULBENIOPSIS R. Thaxter, Bot. Gazette, 69., 1920, p. 17. — Axis simplex, pede distincto, collo bicellulari et sporogonio definito terminato; sporidia hyalina minuta, apice exeuntia. — Genus hoc *Thaxteriolae* et *Endosporellae* verisimiliter affinis, et cum Gen. *Entomocosma* Speg. gregem Thaxteriolarum efformans.

1. **Laboulbeniopsis termitarius** Thaxter, l. c. p. 17, tab. IV fig. 42-43. — 4233
Pede et sporogonio pallide brunnescentibus, collo subhyalino; pede lato extus fortiter convexo, uno latere nigro maculato, infra plus minus acuminato; sporogonio collo subaequante v. longiore, recto, subsymmetrico, infra leniter inflato, ibique duobus cellulis parum distinctis praedito, apicem versus sensim attenuato circa porum constrictulo; totus fungus 100-130 μ long., sporogonio 45-50 × 12, collo 45-50 × 8-10, pede 25 × 12, sporidiis 3,5-4 × 2,5.

Hab. ad apicem cruris Eutermitis morionis var. St. Luciae, Grand Etang Grenada.

ENTOMOCOSMA Spegazzini, Obs. microbiol., in An. Soc. Cient. Argentina, t. 85., 1918, Extr. p. 7. — Receptaculum dimerum appendicem oligomeram perithecium v. antheridia fulcentem coronatum, ungue nigro matrice adfixo; antheridia? subcymbiformia rostratula superposita; perithecium? acrogenum parvum pyri-v. lageniforme, sporis paucis amoeboideis irregulariter subglobosis repletum.

1. **Entomocosma laboulbenioides** Spegazzini, l. c. Extr. p. 8, fig. 7. — 4234
Parvula, tota 75-125 × 10-14, hyalina v. vix straminea, perithecium cellulis binis superpositis fultum, antheridia 3-6 superposita cellula unica insidentia.

Hab. praecipue ad pilos, totius corporis Cercyoni variegati, prope La Plata, Rep. Argentina, America austr.

COREOMYCETOPSIS R. Thaxter, Bot. Gazette, 69., 1920, p. 13 (Etym.

a *Coreomyces* cui simile). — Axis e cellulis superpositis efformatum; cellula basilari majori inflata pedicelliformi; cell. terminalibus demum ob septa evanida sporoforum efformantibus; sporidia numerosa apice emissa.

1. **Coreomycetopsis oedipus** Thaxter, l. c., tab. IV fig. 32-36. — Hyalinus v. flavescens; pedicello inflato infra acuminato concolori; cellulis 10-15 superpositis ultimis e sexta v. septima proliferis; sporoforo subfusoideo v. obclavato; totus fungus 100-135 μ long., sporogonium 45-60 × 12-15, pedicello 25 × 12-15, sporidia elongato-ovoidea 8-9 × 2-2,5. 4235

Hab. ad crura Eutermitis morionis var. St. Luciae, Grand Etang Granada.

PYRENOMYCETÆ Fr. em.

Syll. I p. 1, IX p. 364, XI p. 252, XIV p. 462, XVI p. 398, XVII p. 524, XXII p. 19.

Fam. 1. Perisporiaceæ

Caracteres et dispositionem secundum Spegazzini (in « Physis », t. IV, 1918. p. 281: Perisporiales), comparationis causa tantum ostendimus.

I. Erysipheae Lév. — Biophilae subiculo mucedineo, perithecia astoma, parenchymatica, singula, semper v. juventute pallida.

Hyalosporae: *Erysiphe* Lév., *Microsphaera* Lév., *Phyllactinia* Lév., *Podosphaera* Lév., *Sphaerotheca* Lév., *Uncinula* Lév.

II. Eurotieae (Sacc.) — Saprophilae, subiculo mucedineo, perithecia astoma, parenchymatica, singula, pallida.

Hyalosporae: *Cryptothecium* P. S., ? *Cystotheca* B. et C., *Allescheria* Sacc. et Syd., *Eurotium* Lnk.

Phaeosporae: *Penicilliopsis* Solm., *Laaseomyces* Ruhl.

Hyalodidymae: *Chilemyces* Speg.

III. Perisporieae (Sacc.). — Saprophilae, subiculo dematiaceo, perithecia astoma, parenchymatica, singula, nigricantia.

Hyalosporae: *Anixia* Fr., *Anixiopsis* Hng., *Apiosporium* Knz., *Micromastia* Speg., *Polysporidium* Syd.

Phaeosporae: *Arachnomyces* Mass. et Sal., *Ascotricha* Rbh., *Cephalotheca* Fuck., *Chaetomidium* Zpf., *Chaetotheca* Zkl., *Magnusia* Sacc., *Orbicula* Cke., *Pleuroascus* Mss. et Slm., *Thielavia* Zpf.

Hyalodidymae: *Pampolysporium* Mgn.

Phaeodidymae: *Argynna* Mrg., *Marchaliella* Wnt., *Testudina* Bizz., *Wentiomyces* Koord., *Zopfia* Rbh. (= Richonia Boud.).

Phaeophragmiae: *Perisporium* Fr.

Phaeodictyae: *Ceratocarpia* Roll., *Cleistotheca* Zkl.

IV. Melioleae Speg. — Biophilae, subiculo dematiaceo, perithecia astoma parenchymatica, singula, nigricantia.

Hyalosporae: *Meliolopsis* Spg. (= Sacc.) (cum spec. *Apiosporii* biophilis), *Pilgeriella* Hung. (= Guignardiella Sacc. et Syd.), *Samarospora* Rstr.

Hyalodidymae: *Dimeriella* Speg., *Dimerina* Thsz., *Neorehmia* v. Höhn.

Phaeodidymae : *Alina* Rcb., *Balladyna* Rcb., *Dimerium* Sacc. et Syd., *Kusanobotrys* Hng., *Parodiella* Speg. (= Maireella Syd.), *Phaeodimeriella* Speg. (= Thsz.), *Winteromyces* Speg.
Hyalophragmiae : *Zukalia* Sacc., **Trichomerium** Speg. n. gen.
Phaeophragmiae : **Euantennaria** Speg. n. gen., **Ceratosperma** Speg. n. gen., *Meliola* Fr., *Perisporina* Hng., *Schenckiella* Hng.
Phaeodictyae : **Pleomerium** Speg. n. gen.
Scolecosporae : *Ophiomeliola* Strb.

V. Lasiobotryeae. — Biosaprophilae, subiculo plus minus evoluto, dematiaceo, stromata superficialia discoidea, perithecios astomos parenchymaticos globosos gerentia efformante.

Phaeodidymae : *Lasiobotrys* Knz.
Hyalophragmiae : **Paropsis** Speg. n. gen.
? : *Scyphostroma* Strb.

VI. Englerulaeae P. Henn. — Biophilae, subiculo mucedineo plus minus evoluto, perithecia subglobosa, subastoma, anhista, singula, subnigricantia.

Hyalosporae : **Hyalodermella** Speg. n. gen.
Didymosporae : *Dimeriosporiella* Speg., *Englerula* Hng., *Hyalotheles* Speg., *Schiffnerula* v. Höhn.
Phragmosporae : *Hyaloderma* Speg.
Scolecosporae : *Saccardomyces* Hng., **Leptascospora** Speg. n. gen.

VII. Capnodieae Sacc. — Biophilae, subiculo membranaceo, perithecia ostiolata, parenchymatica v. prosenchymatica, singula, nigricantia.

Conspectus generum Capnod., seu nova dispositio syst. secund. Cl. Spegazzini, suo loco conferenda.

Subfam. 1. **Erysipheæ** Lév.

PODOSPHAERA Kunze. — Syll. I p. 2, IX p. 364.

1. **Podosphaera Myrtilli** J. Dufrenoy, Bull. Soc. Mycol. de Fr., XXXV, 1919, p. 35. — Descriptio nulla ; nomen nudum ad interim. 4236

Hab. in pagina inferiore foliorum Vaccinii Myrtilli (Ericaceae), « Tourbières du Lienz », 1400 m. alt., Gallia.

UNCINULA Lév. — Syll. I p. 6, IX p. 366, XI p. 252, XIV p. 462, XVI p. 399, XVII p. 524, XXII p. 21.

1. **Uncinula geniculata** Gerard. — Syll. I p. 8 — var. **carpinicola** K. Hara, Journ. Forestry Asso. Japan, Tokyo, t. IV, 1915, n. 382, p. 62, cum icon.; Mycologia 1919, p. 80. — A typo recedit vegetatione 4237

amphigena, peritheciis multo minoribus (70-100 μ diam.), appendicibus longioribus (150-440 × 6-7), ascis 6-8, sporis 15-20 × 9-11.

Hab. in foliis Carpini (Betulaceae), loco ignoto Japoniae.

2. **Uncinula necator** (Schw.) Burr. — Syll. I p. 8 (*U. americana*) — var. **Actinidiae** K. Hara, Journ. Forestry Asso. Japan, Tokyo, t. IV, 1915, n. 392, p. 63, cum icon. — *U. Actinidiae* Miyabe in Salmon Mon. Eris. 1900, p. 101 (nomen nudum); Mycologia, 1919, p. 81. — A typo praecipue recedit appendicibus brevioribus et robustioribus, 100-250 μ long., 6-8 μ cr., subrigidis, basi distincte inflatis, 9-13 μ diam.; ascis typice apiculatis. 4238

Hab. in foliis Actinidiae polygamae et A. Kolomiktae (Dilleniaceae), loco ignoto Japoniae.

3. **Uncinula curvispora** K. Hara in litt. ad Tanaka in Mycologia 1919, p. 80, *Unc. septata* Salm., Syll. XVI p. 400 XVII p. 524 — var. *curvispora* K. Hara, Journ. Forestry Asso. Japan, Tokyo, t. IV, 1915, n. 392, p. 62. — Caespitulis obsoletis hypophyllis, tenuissime membranaceis evanidis; peritheciis punctiformibus, sparsis, depresse discoideis v. conspicue inflexis, 170-220 μ diam., nigris; contextu membranaceo, irregulariter celluloso, cellulis quandoque plus minus radiantibus, 4-8 μ cr.; fulcris numerosis, 200-300, filiformibus, simplicibus, levibus, tenuiter tunicatis 35-200 μ long., medio 4-11 septatis, infra brunneo-flavescentibus, 6-7 μ cr., apicem versus hyalinis sensim attenuatis ibique 2-2,5 μ cr. et spiraliter incurvatis; ascis 3-5, ellipsoideis v. ovoideis, apice rotundatis, infra apiculatis, tunica crassiuscula sed fragili, 65-75 × 37-50; sporis 4-5, ellipsoideis, ovoideis v. ovoideo-reniformibus, utrimque rotundatis, flavescentibus, contextu granuloso, 28-35 × 12-15 raro 45 × 18. 4239

Hab. in foliis Fagi silvaticae var. Sieboldi (Fagaceae), loco ignoto Japoniae. — Caracteribus peritheciorum ad novum subgen. (**Asterothecia**) adscribenda species.

4. **Uncinula Pterocarpi** Doidge, Trans. R. Soc. South Africa, v. V, P. III, 1915, p. 240, tab. XXXII. — Amphigena; mycelio epiphyllo dense arachnoideo, latissimo per totam matricem effuso, cretaceo v. flavidulo, persistenti; mycelio hypophyllo tenui, effuso, albido; peritheciis numerosissimis, dense gregariis v. plus minusve sparsis, primo luteis, subglobosis, dein castaneis v. atro-brunneis, globosis depressis, 100-120 μ diam., plerumque ca. 114 μ, cellulis obscuris; appendicibus numerosis, 50-75, saepissime ca. 60, perithecii diametrum leniter superantibus, longitudine varia in quoque perithecio, simplicibus, eseptatis, rectis v. leniter curvulis, 3-5 μ latis, sur- 4240

sum non incrassatis, apice uncinatis v. saepe subhelicoideis, hyalinis, basi demum crasse tunicatis; ascis 8-12, ovatis, 45-50 × 20-28, basi breviter pedicellatis, curvulis, 4-sporis; sporidiis ellipsoideis hyalinis, 13-18 × 12-13.

Hab. in foliis vivis Pterocarpi cerisei (Leguminosae), Duivelskloof, Zoutpansberg Dist., Transvaal (E. M. Doidge) -- *U. Tectonae* affinis.

5. **Uncinula aspera** Doidge, Trans. R. Soc. South Africa, v. V, P. III, 1915, p. 240, tab. XXXIII. — Epiphylla; mycelio arachnoideo, late effuso, albido, subpersistente; peritheciis sparsis, atro-brunneis, globosis depressis, 90-105 μ diam., cellulis distinctis, ca 15 μ latis; appendicibus 15-30, rectis v. leniter curvulis, simplicibus, eseptatis, tenue tunicatis, totis hyalinis, basi 5-6 μ latis, asperulis, sursum incrassatis usque 9 μ, apice uncinatis v. interdum helicoideis, perithecii diametrum leniter superantibus 125-165 μ longis; ascis 4-6, ovatis v. subglobosis, sessilibus, 51-57 × 45-48, 4-6-sporis; sporidiis 18-21 × 13-14. 4241

Hab. in foliis Fici sp. (Moraceae, Wonderboom, Pretoria Dist., Transvaal (J. Burtt-Davy). — *U. Salicis* affinis.

6. **Uncinula Salmoni** H. et P. Sydow, Ann. Mycol. XI, 1913, p. 114.— *Unc. Sengokui* Salm. forma, Ann. Mycol. 1906, p. 244. — Peritheciis amphigenis, mycelio subpersistenti tenuissimo effuso insidentibus, 85-120 μ diam., cellulis parietis exterioris 10-14 μ latis; appendicibus 9-21 in quoque perithecio 100-170 μ long., rectis v. lenissime curvulis, simplicibus, hyalinis, eseptatis, rigidis, parte basali 6-7,5 μ latis, sursum versus non v. leniter latioribus, ad apicem dense convolutis subinde fere helicoideis haud inflatis; ascis 4-6 in quoque perithecio, subglobosis v. late ovoideis, 45-50 × 28-30, pedicello brevissimo; sporis plerumque 4-6 raro 3 vel 7, ellipsoideis, utrinque rotundatis, 17-19 × 10. 4242

Hab. in foliis Fraxini Bungeanae DC. var. pubescentis Wg. (Oleaceae), Kurokawa prov. Ugo, Japonia bor. (M. Miura).

7. **Uncinula Koelreuteriae** Miyake, Bot. Magaz. Tokyo XXVII (1913) p. 39, tab. 1 fig. 1-3 et XXVIII (1914). — Mycelio epiphyllo, tenui; peritheciis sparsis, atris, hemisphaericis, 150-300 μ diam. excipulo e pseudocellulis 8-16 μ diam. constituto, appendicibus copiosis, ultra 100 ornatis, appendicibus hyalinis, lumine vix visibili, continuis, rectis vel subundulatis, apice tenuatis et spiraliter breve involutis, 24-35 × 7-12; ascis in quoque perithecio circa 20, obovatis, 4243

longe ellipsoideis vel irregularibus, brevissime crasseque pedicellatis, 64-100 × 34-48, apice tunica tenuiore, typice octosporis; sporidiis ellipsoideis, raro ovatis, e hyalino viridulis, intus minute granulosis et grosse 1-2-guttatis, 15-18 × 10-13.

Hab. in foliis Koelreuteriae bipinnatae (Sapindaceae), prope Peking, China. — Inter excipulum et ascos adest mycelium septatum paraphysioideum.

LEVEILLULA Arnaud, Ann. Service Épiphyt. t. 7., 1919-1920, p. 92, 94, 108, cum icon. — Perithecia ut in *Erysiphe*, status conidicus mycelio interno donato et conidia gen. *Oidiopsis*. — Typus generis *Leveillula taurica* (Lév.) Arnaud. 4244

TYPHULOCHAETA S. Ito et Hara in Bot. Mag. Tokyo, XXIX (1915) p. 20 (Etym. *Typhula* et *chaete*, seta). — Mycelium superficiale, haustoriis in cellulas epidermicas matricis penetrantibus. Perithecia globosa v. globoso-depressa, astoma, omnino erysiphacea. Asci plures, 8-spori; sporidia ellipsoidea continua, hyalina. Appendices perithecii indivisae, clavatae, hyalinae.

1. **Typhulochaeta japonica** S. Ito et Hara, l. c. p. 20 tab. I. — Hypophylla, tenuis, persistens; perithecis sparsis v. subgregariis, globosis v. globoso-depressis, 120-200 μ diam., cellulis contextus 10-20 μ diam.; appendicibus numerosis (90-160), supra medium perithecii anulatim egredientibus, indivisis, clavatis, apice rotundatis, crasse tunicatis, hyalinis, 45-65 × 10-15; ascis 5-13 ovoideis, oblongo-ovoideis, v. ellipsoideis, breviter pedicellatis, 90-97 × 40-45; sporidiis normaliter octonis, rarius senis, oblongo-ellipsoideis, hyalinis v. dilute flavidis, granulosis, 18-36 × 12-18. 4245

Hab. in foliis Quercus glanduliferae (Fagaceae), pr. Mino Kawanye, Japoniae. — Conidia nondum cognita.

Subfam. 2. — **Eurotieæ** Sacc.

(Aspergilleae, v. Plectascineae p. p.)

EUROTIUM Link. — Syll. I p. 95, IX p. 37, XI p. 254, XVI p. 1123, XVII p. 527, XXII p. 25.

1. **Eurotium subgriseum** Peck, N. Y. State Mus. Bull. 150 [1910] p. 30 (1911). — Peritheciis minutis, 100-125 μ diam., dense caespitosis, globosis vel subglobosis, flavis, sporidiis globosis, flavo-viridibus, 6-8 μ diam. — Status conidicus *Aspergillus subgriseus* Peck. — Syll. 4246

XIV p. 1046 — conidiophoris 100-125 μ altis, 7-8 μ crassis, in vesiculam subglobosam 30-40 μ diam. productis; conidiis catenulatis, subhyalinis, minutis, 3,5-4 μ diam.

Hab. ad ligna emortua et in cortice P l a t a n i, Brooklyn N. Y., Amer. bor.

2. **Eurotium herbariorum** (Wigg.) Lnk. — Syll. I p. 26. — var. **megalospora** Spegaz., Rel. Mycol. trop. etc. in Bol. Ac. Nac. Cienc. Cordoba, t. 23. 1919, Extr. p. 87. — A typo differt ascis (16-18 μ diam.) sporidiisque majoribus (8 μ diam.), minutissimeque reticulatis. 4247

Hab. ad ramulos udos dejectos in silvis prope Apiahy, America austr. (J. Puiggari).

3. **Eurotium Desmazieri** Cast., Suppl. Cat. pl. Mars. II p. 56 (1851).— Gregarium, minutissimum, tomento raro; peritheciis sulphureis. 4248

Hab. in foliis emortuis M o r i a l b a e pr. Marseille, Galliae. — Teste auctore, videtur distingui ab *Eurotio herbariorum* minutie, subiculo subnullo, peritheciis interne coloratis. An ergo potius *Eurotium repens* De Bary (1871), quod vero posterius?

4. **Eurotium coriorum** Wallr. — Syll. I p. 27 — var. **gelatinicola** Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires XXIII p. 34 (1912). — A typo praecipue recedit sporidiis cospicue majoribus.— Perithecia globosa, 100-150 μ diam., sulfurea, subiculo ex hyphis hyalinis, 2-4 μ cr., per aetatem crustula rufescente obductis, densiuscule intertextis, ramulosis efformato insidentia; asci subglobosi 14-18 × 14-16; sporidia sphaerica 7-8 μ diam., levia vel subtilissime verrucosa, areola mucosa tenui mox evanida circumdata. 4249

Hab. ad superficiem g e l a t i n a e g l y c e r i n a t a e diu loco udo servatae, La Plata, Argentina.

5. **Eurotium verruculosum** Vuillemin, Bull. Soc. Myc. de Fr. XXXIV, 1918, p. 83, fig. 1-17. — Effusus, hyphis sterilibus repentibus, septatis, hyalinis; conidiophoris erectis, parce septatis, ab imo dilatatis, summo usque ad 22 μ latis; vesicula oblonga, 20-40 μ diametro; phialide-claviformi, 13-17,5 × 6,6-7,6, basi constricta; conidiis subglobosis, peripheria verruculosis, basi levibus, summo convexis, vel disjunctore ornatis, 9,5 × 9,5 vel 10 × 8-9; vesiculae, phialides, conidia plus minus fuliginea. Perithecia sulphurea, 120-200 μ diametro, appendicibus destituta; ascis rotundatis, 18-20 μ, octosporis; ascosporis lenticularibus, 9-9,5 × 7,4-7,6, hyalinis, verruculosis rotundatis ornatis, quae longe a polis evanescunt et interdum marginem non sulcatam invadent. 4250

Hab. in dauco cocto, in officina botanica nanceianae universitatis, Gallia.

ARACHNOMYCES Massee et Salm. — Syll. XVII, p. 532.

1. **Arachnomyces flavidulus** Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires, XXIII p. 35 (1912). — Sparsus, superficialis, sulfureus, matrici arcte adnatus; subiculo tenuissimo, mox evanescente, laxissimo, ex hyphis laxe irregulariter ramosis, gracilibus, 1,5-2 μ cr., hyalinis efformato; peritheciis sparsis, globosis vel globoso-depressis, 250-500 μ diam., flavis, fragilibus, densiuscule tomentosis, tenuissime membranaceis, contextu flavidulo indistincto, ostiolo plane nullo; ascis subglobosis, minutis, conglobatis, 12 μ diam., octosporis, cito diffluentibus; sporidiis e globoso ellipsoideis, tenuissime tunicatis, levibus, 4 × 3. 4251

Hab. ad folia sternata subputrescentia Eucalypti globuli (Myrtaceae), in Parque La Plata, Argentina. — Species ut videtur, *Eurotio? chilensi* Mont. affinis sed rite distincta.

CEPHALOTHECA Fuck. - Syll. I p. 36, IX p. 377, XIV p. 465, XVI p. 407, XXII p. 30.

1. **Cephalotheca abellinensis** Sacc., Notae Mycol. XXIV p. 28 (Bull. Orto bot. Napoli 1918). — Peritheciis laxe gregariis, superficialibus, globulosis, nigricantibus, minutis, 180-200 μ diam., vertice rotundatis, astomis (?); contextu parenchymatico, rufescenti praeditis, setosis; setulis rigidulis, simplicibus, rectis, acutis, continuis, basi vix incrassatis, rufo-fuligineis, sursum dilutioribus, 180 × 18 (basi); ascis globosis, sessilibus, 18-22 μ diam., 6-8-sporis, aparaphysatis; sporidiis globulosis, conglobatis, 6 μ diam., levibus, fuligineis. 4252

Hab. in ligno denudato, udo Coryli Avellanae (Betulaceae), Avellino, Ital. merid. — Habitu rigescenti a ceteris generis speciebus descisit.

DICHLAENA (Dur. et Mont.) em. Maire, Bull. Soc. Hist. Nat. Afr. du Nord 1917, p. 159. — Cfr. Syll. III p. 620. — Mycelium floccoso-radiatum, floccis raris, conidiis (ut videtur) nullis. Perithecia vitellina e tunica duplici composita, utraque membranacco-cellulosa exterior tandem saepe prope basim circumscissa crepulam relinquens, interior vero tenuissima. Asci inordinati subglobosi, octospori; sporidia simplicia hyalina, capillitium nullum.

1. **Dichlaena Lentisci** Mont. et Dur. emend. Maire, Bull. Soc. Hist. Nat. 4253

Afr. du Nord, 1917 p. 159. — Cfr. Syll., l. c. — Hypophylla, rarius epiphylla, e flavo vitellina; perithecio exteriori subgloboso minute celluloso, basi brevissime radiatimque floccoso, tandem saepe circumscisso, interiori tenuissimo, venis laxe anastomosantibus saepe percurso; ascis subglobosis, 8-sporis, 8-10 × 7-8; sporidiis subglobosis v. breviter ellipsoideis, levibus, 1-guttulatis, 3-4 × 3.

Hab. in foliis delapsis Pistaciae Lentisci (Sapindaceae) in Mauretania, Afr. bor.

PERISTOMIUM Eckley Lechmere, Compt. rend. Acad. Sci. Paris 155 (1912) p. 178, Bull. Soc. Myc. de Fr. 1913, p. 307. [A gen. *Chaetomium* vix diversum peritheciis levibus nec setulosis].

1. **Peristomium desmosporum** Eckley Lechmere, l. c., et Bull. Soc. Mycol. Fr. 1913, p. 307-328, f. 2-12, t. XX et XXI. — Peritheciis membranaceis, sphaericis, atris, superficie mycelii enatis, laevibus pilisve simplicibus valde irregulariter dispositis ornatis, ostiolo apicali praeditis; ascis, paraphysibus non immixtis, membrana tenuissima maturescenti-dilabente tunicatis; ascosporis octonis, brunneis; conidiis oidiisve secundum varietatem; peritheciis 160-200 μ diam. longas ascosporarum catenas emittentibus; ascis sphaericis ellipticisve, 14-16 μ diam., 8-sporis; ascosporis utraque fine leniter aculeatis 5,4 μ longis. — Var. **Oidium**: Oidiis sporisve intercalaribus secus hyphas enatis, fere atris, pro more, 8 μ long., 5 μ lat. — Var. **Verticillium**: conidiis ut in Verticillio nascentibus, sphaericis, laevibus, brunneis 4 μ diam. 4254

Hab. in silvis primaevis regionis Côte-d'Ivoire nuncupatae, Africae occidentalis (A. Chevalier).

Subfam. 3. Engleruleæ P. Henn.

Dispositio syst. generum secundum F. Theissen, Verh. zool.-bot. Ges. Wien, Bd. 66., 1916, p. 322, et Theissen et Sydow, Ann. Mycol. 15., 1917, p. 467.

A. Perithecia parenchymatica, cellulis demum evanidis

I. Perithecia insidentia polyasca

a) Mycelium exhyphopodiatum

α Sporidia bilocularia

1. Hyalina . . . . . 1. Euthrypton Theiss.
2. Brunnea . . . . . 2. Englerula P. Henn.

β Sporidia quadrilocularia hyalina . . 3. Theissenula Syd.
γ » 5-plurilocularia, filiformia . 4. Hyaloderma Speg.

b) Mycelium hyphopodiatum
α Sporidia bilocularia hyalina . . . 5. Schiffnerula Theiss.
β » » brunnea . . . 6. Phaeoschiffnerula Ths.

II. Perithecia persistenter pedicellata, monasca . 7. Thrauste Theiss.

B. Perithecia hyphis meridianis donata

I. Mycelium nullum
1. Asci infra filamenta paraphysoidea mucosa immersa. Sporidia hyalina unilocularia (matura plurilocularia?) 8. Sintexis Theiss.
2. Filamenta paraphysoidea nulla. Sporidia phaeodidyma . . . . . 9. Rhizotexis Th. et Syd.

II. Mycelium parcum; strato ascigero capsula mucosa anhista vestito
1. Paraphyses nullae; sporidia hyalina muralia 10. Nostocotheca Starb.
2. Paraphyses praesentes; sporidia filiformia 11. Ophiotexis Theiss.

III. Mycelium copiosum; perithecia fortiter incrustata; hyphae persistentes, circa perithecia stratum intricatum efformantes; paraphyses nullae; sporidia bilocularia brunnea
1. Mycelium setulis destitutum; perithecia polyasca . . . . . 12. Parenglerula v. Höhn.
2. Mycelium setulosum; perithecia monasca 13. Linotexis Syd.

Genera dubia: *Dimerosporiella* Speg., *Hyalotheles* Speg.

EUTHRYPTON Theiss., Verh. zool.-bot. Ges. Wien, Bd. 66, 1916, p. 306 (Etym. a *euthryptos*, quia perithecia facile evanida). — Mycelium superficiale, ramosum, septatum, exhyphopodiatum, pallidum, non setulosum. Perithecia globosa astoma, evanida. Asci numerosi, ovoidei, aparaphysati, in muco immersi, octospori. Sporidia bilocularia hyalina.

1. **Euthrypton globiferum** (Ell. et Ev.) Theiss., l. c. — Ita vocanda est 4255
Asterina globifera Ell. et Ev. — Syll. XIV, p. 696.

ENGLERULA P. Henn. — Syll. XVII p. 529, XXII p. 26.

1. **Englerula mexicana** Theissen in Sacc., Ann. Mycol. XII, 1914, 4256
p. 301. — Mycelio hyphopodiis destituto, irregulariter effuso, tenui, hyphas *Asterinae Veae-crucis* ambiente, ex hyphis irregulariter ramosis, stramineis tenuiter septatis, 2,5-3,5 μ cr. flaccidis compo-

sito; peritheciis ad hyphas sessilibus, fuscis v. straminco-fuscis ex cellulis angulatis 6-8 μ diam., parenchymatice efformatis, contextu tamen mox indistincto (cellulis mucose secedentibus), extus muco indurato minime obtectis, intus muco hyalino impletis; ascis fasciculatis aparaphysatis, clavato-cylindraceis, 8-sporis; sporidiis distichis fusco-brunneis v. violaceo-brunneis, oblongis, medio septatis, utrinque rotundatis, 16 × 6, cellula superiore paullo latiore.

Hab. in foliis subvivis Laurineae cujusdam (Litsaeae?), Veracruz Mexico (S. Bonansea). — Socia adest *Asterina Verae-crucis* Theiss. An *Asterina insignis* Karst. et Roum., in Laurineis, hanc et *Asterinam Verae-crucis* Theiss. confuse complectitur?

2. **Englerula Strewiae** Theiss., Verh. zool.-bot. Ges. Wien Bd. 66., 1916, p. 327.— Mycelio maculas 0,5 1 cm. diam. quandoque confluentes obscuras efformante; hyphis obscuris, reticulato-ramosis, exhyphopodiatis, 3-3,5 μ cr. laxe septatis; peritheciis hinc inde efformatis 35-50 μ diam. raro usque 75 μ, primum brunnescentibus demum nigris superficie asperula donatis, contextu cellulis minutis polygonalibus praedito; conidiferis conidia e piriformi ovoidea brunneo-nigricantia, levia unilocularia (Asterostomellae ad instar) 25-28 × 15-19 ferentibus; ascigeris monascis, ascis octosporis; sporidiis bilocularibus obscure brunneis, levibus utrinque rotundatis 26 30 × 11-13, loculis quandoque inaequalibus. 4257

Hab. in foliis Strewiae ambiguae, Los Baños, Ins. Philipp. (Raimundo).

THEISSENULA H. et P. Sydow, Ann. Mycol. XII, 1914, p. 198 (Etym. a mycologo praeclaro Fr. Theissen de studio Ascomycetum imprimis merito). — Subiculum tenue haud hyphopodiatum, conidia pluricellularia colorata generans. Perithecia in subiculo superficialia, sessilia, ovato-globosa, olivaceo-fusca, astoma, initio parenchymatice cellulosa, dein histolysis ope subanhista. Asci aparaphysati, clavati, pauci, octospori. Sporidia anguste clavata hyalina, 1-septata, in maturitate 3-septata.— Gen. *Schiffnerulae* proximum.

1. **Theissenula clavispora** H. et P. Sydow, l. c. p. 198. — Subiculo hypophyllo, tenui, maculiformi subradiante plagulas griseo-atras 1-4 mm. latas efformante; hyphis haud hyphopodiatis, variis, aliis longis rectiusculis v. parum flexuosis crassiuscule tunicatis obscure fuligineis remote septatis (articulis 15-40 μ long.) 6-8 μ cr., aliis multo tenuioribus flexuosis copiosioribus tenuiter tunicatis 3-4 μ cr. dilute fuligineis remote septatis (articulis 25-50 μ long.) et vix 4258

ramosis; conidiis clavulatis, oblongis v. fusoideis, plerumque 3-septatis, non constrictis, 30-60 × 9-12; peritheciis laxe gregariis, in subiculo superficialibus, ovato-globosis, haud ostiolatis, 40-65 μ alt. 40-50 μ latis, olivaceo-brunneis, tunica ex cellulis subparenchymaticis v. irregularibus subinde etiam lobulatis imbricatim positis prominulis 5-8 μ latis composita; ascis paraphysatis ca 5-8 in quoque perithecio, clavatis, tenuissime tunicatis, 22-25 × 9-11; sporidiis octonis, in medio asci parallele v. fasciculatim positis, anguste clavatis, superne rotundatis et crassioribus, inferne sensim attenuatis, ad basim acutiusculis, primitus continuis, sed mox 1-septatis, in maturitate 3-septatis, non constrictis, hyalinis, 15-16,5 × 1,5-2.

Hab. in foliis subvivis Schizostachyi acutiflori (Graminaceae), Los Baños prov. Laguna, ins. Philippinenses (S. A. Reyes).

HYALODERMA Speg. — Syll. IX p. 437, XI p. 270, XIV p. 465, XVI p. 406, XXII p. 27.

1. **Hyaloderma Bakeriana** P. Henn., Hedw. vol. 48. (1908), p. 103. — Hyphis mycelii flavidulis, septatis, 3-4 μ crassis; peritheciis superficialibus, sparsis, minutis, oculo nudo haud conspicuis, flavidis, udis ovoideis, tenuissime membranaceis, pellucidis, 250 μ circ. diam., contextu subanhysto ex hyphis tenuibus radiantibus composito; ascis clavatis, rotundatis, octosporis, 90-160 × 10-14; sporidiis linearibus utrinque acutiusculis flexuosis, hyalinis, 3-7-septatis, 40-60 × 3-3,5. 4259

   Hab. in vaginis siccis Bactridis majoris (Palmae), socia *Cyphella paraënsis* P. Henn. in hyphis *Helminthosporii,* Hort. bot. Goeldi, Parà (C. J. Baker).

2. **Hyaloderma depressulum** Spegaz., Rel. Mycol. trop. etc. in Bol. Ac. Nac. Ciencias Cordoba, t. 23., 1919, Extr. p. 93. — Subiculum latiuscule effusum atrum submembranaceum tenuissimum, ex hyphis tortuosis dense congestis chlorinis 3 μ cr. efformatum; peritheciis sparsis v. laxe gregariis pusillis hemisphaericis, 75-125 μ diam., basi plana subiculoque late adnatis superne anhystis chlorinis per aetatem subregulariter disruptis et pseudoostiolatis, inferne dense minuteque parenchymatico-sinuosis olivaceo-fuligineis; ascis obclavulatis apice abrupte subtruncato-rotundatis, basi obtuse cuneatis breviter crassiusculeque pedicellatis, 25 × 8, paraphysibus undulatis crassis simplicibus longioribus obvallatis, 8-sporis; sporidiis linearibus arcuatis utrinque attenuato-acutis minute 7-11-guttula- 4260

tis, hyalinis, 20 × 2,5.

Hab. parasitica in subiculo *Meliolarum* v. *Asterinarum* ad folia viva Abutilonis?, Apiahy America austr. (J. PUIGGARI). — *H. inperspicuo* Speg. valde affinis sed differt perithecis infra applanatis, paraphysibus, ascis sporidiisque minoribus.

3. **Hyaloderma Puiggarii** Spegaz., Rel. Mycol. trop. etc., in Bol. Ac. 4261
Nac. Cienc. Cordoba, t. 23., 1919, p. 94. — Subiculum mucedineum parum evolutum et mox evanescens; perithecis solitariis v. laxe 2-3 gregariis, globoso-depressis, perpusillis, 75-100 μ diam. glabris fusco-melleis in dimidio supero anhystis pallidioribus, in dimidio infero obsolete parenchymaticis infuscatisque; ascis subcylindraceis, antice obtuse rotundatis, deorsum cuneatis breviter gracilitergue pedicellatis, aparaphysatis, octosporis, 65-70 × 8; sporidiis lineari-fusoideis, utrimque acutis, leniter arcuatis, 40-50 × 1,5-2, 9-13-septatis hyalinis.

Hab. parasitica ad stromata Polystomellae repandae Speg. in foliis Eugeniae?, prope Apiahy, Amer. austr. (J. PUIGGARI). — *H. Glaziovi* Pat. videtur affinis.

PHAEOSCHIFFNERULA Theiss., Broteria 12., 1914, fasc. I, p. 21, fig. 1; Verh. zool.-bot. Ges. Wien Bd. 66., 1916, p. 336. — Est *Schiffnerula* phaeospora. Conidia mycelii quadrilocularia.

1. **Phaeoschiffnerula Compositarum** Theiss., l. c., fig. 1. — Maculis my- 4262
celialibus parvis nigricantibus irregulariter subgregariis; hyphis flexuosis 7-9 μ cr. pallide brunneis articulatis levibus ramosis et reticulum densum efformantibus; hyphopodiis numerosis, pallide brunneis e globosis hemisphaericis, insidentibus, levibus, continuis, 10-12 μ cr.; perithecis sparsis, globosis, mycelii concoloribus, ostiolo parum distincto praeditis, 120-150 μ diam., demum apice late apertis; contextu primum distincte parenchymatico e cellulis 8-12 μ cr. efformato dein indistincto, circa ostiolum cellulis elongatis radiantibus obscurioribus; ascis 4-7, aparaphysatis, e late ellipsoideis late clavatis, 55-70 × 25-35, crasse tunicatis, octosporis; sporidiis uniseptato-constrictis, levibus, obscure brunneis 23-27 × 12-14, loculis plerumque parum inaequalibus. — Conidiis mycelicis quadrilocularibus, rectis v. curvulis utrinque rotundatis, levibus 32-54 × 18-22, brunneo-fumosis, loculis duo apicalibus quandoque pallidioribus.

Hab. in foliis Compositae cujusdam, in silvis prope S. Leopoldo, Rio Grande do Sul, Brasilia (F. THEISSEN).

THRAUSTE Theissen, Verh. zool.-bot. Ges. Wien, Bd. 66., 1916, p. 337. — (Etym. a *thraustos*, ob perithecia evanida). — Mycelium superficialiter septatum, ramosum hyphopodiatum non setosum; perithecia pedicellata parenchymatica, demum evanida mucosa ascum solitarium continentia.

1. **Thrauste Medinillae** (Racib.) Theiss., l. c., p. 338 fig. 2. — Ita vocanda est *Balladyna Medinillae* Racib., *Englerula Medinillae* (Rac.) v. Höhn. 4263

2. **Thrauste affinis** Syd., Ann. Mycol. 1917, p. 197. — Epiphylla, plagulas parum perspicuas 3-5 mm. diam. tenues orbiculares formans; mycelium ex hyphis longiusculis rectiusculis fuscis septatis ramosis 6-8 μ crassis compositum, hyphopodia numerosa alternantia, semiglobolosa 10-13 μ alta vel lata, sessilia, continua; perithecia copiosa, matura 30-50 μ alta vel lata, globulosa, immatura minora et praecipue angustiora, primitus membrana unistratosa brunneo-parenchymatica obsita, demum, membrana externa irregulariter disrumpente et secedente, stratum interius diaphanum hyalinum relinquentia, stipite brunneo persistente 15-25 μ longo 7-9 μ crasso suffulto; asci globosi vel subglobosi, 28-35 μ diam. aparaphysati; sporae conglobatae, oblongae vel ellipsoideo-oblongae, utrinque rotundatae, medio 1-septatae et constrictae, maturae obscure brunneae, 20-25 × 10-13 μ. 4264

Hab. in foliis P y g e i spec. (Rosaceae), Bontoc, Luzon, Ins. Philipp. (H. S. Yates).

SYNTEXIS Theiss., Verh. zool.-bot. Ges. Wien, Bd. 66., 1916, p. 340 (Etym. a *syntexis*, quia perithecia evanida). — Mycelium nullum. Perithecia infra tantum parenchymatica, caeterum ex hyphis evanidis meridianis efformata. Asci numerosi aparaphysati in muco et hyphis paraphysoideis immersi, octospori. Sporidia hyalina unilocularia fusoidea demum plurilocularia.

1. **Syntexis Tibouchinae** (P. Henn.) Theiss, l. c. p. 341, *Physalospora Tibouchinae* P. Henn., Fungi S. Paul. IV, Hedwigia v. 48., 1908, p. 9. — Maculis rotundatis, brunneo-fuscis; peritheciis gregariis, epiphyllis, erumpenti-superficialibus, subglobosis vel ovoideis, fuscis, 150-200 μ diam.; ascis clavatis, vertice rotundatis, octosporis, 55-60 × 12-16, paraphysibus filiformibus hyalinis 2 μ crassis; sporidiis subdistichis, oblongis, clavatis vel subfusoideis, obtusis, hyalinis, continuis, 15-20 × 4-5. 4265

Hab. in foliis T i b o u c h i n a e (Melastomataceae), Serra da

Cantareira, S. Paulo, Brasilia.

RHIZOTEXIS Theiss. et Sydow, Ann. Mycol., 15., 1917, p. 140 et 469.— Perithecia ex hypostromate epidermico orta, globosa, astoma, membrana extus obscura minute parenchymatica, demum mucosa, intus ex hyphis meridianis constituta, pallida, matura etiam plus minus mucoso-evanescenti. Asci pauci, aparaphysati octospori. Sporidia brunnea bilocularia.

1. **Rhizotexis Bauhiniarum** (P. Henn.) Th. et Syd., l. c.— Ita vocanda 4266
Parodiella Bauhiniarum P. Henn., Syll. XVII p. 541.

OPHIOTEXIS Theiss., Verh. zool.-bot. Ges. Wien Bd. 66., 1916, p. 345.— Paraphyses et sporidia filiformia; caeterum ut in gen. *Nostocotheca* Starb., Syll. XVI p. 806.

1. **Ophiotexis perpusilla** (Speg.) Theiss., l. c. Ita vocandum est *Hya-* 4267
loderma perpusillum Speg — Syll. IX, 438 (= *Pseudomeliola perpusilla* (Speg.) Rehm).

PARENGLERULA v. Höhnel, Fragm. z. Mykol. X n. 525 in Sitzb. k. Ak. Wiss. Wien, math.-naturw. Kl., 119. Bd., Abth. I, 1910, p. (465) 73. — Subiculum brunneum, superficiale, ex hyphis hyphopodiatis efformatum. Perithecia globosa, parietibus demum evanidis et in filamentis mucosis paraphysoideis ascos circumdantibus mutatis. Paraphyses nullae. Asci pauci, ovoidei, octospori. Sporidia brunnea, bilocularia.

1. **Parenglerula Mac-Owaniana** (Thüm.) v. Höhn. — Ita vocanda *Me-* 4268
liola Mac-Owaniana Thüm. et *Asterina Mac-Owaniana* Kalch. et Cooke, Syll. I p. 41.

LINOTEXIS Syd., Ann. Mycol. 1917, p. 197. — Mycelium copiose evolutum, superficiale, hyphopodiatum, setigerum. Perithecia ovato-globosa, pariete histolysis ope in hyphas dissoluto, mono-ascigera. Asci ovati, octospori; aparaphysati; sporae fuscae, bicellulares.

1. **Linotexis philippinensis** Syd., Ann. Mycol. l. c. p. 198. — Epiphylla, 4269
plagulas primitus minutas, sed mox confluentes majores et effusas saepeque totam folii superficiem occupantes formans; mycelium copiose evolutum, ex hyphis rectis valde ramosis septatis obscure brunneis 6-8 μ crassis compositum; hyphopodia numerosa, alternantia, continua, subglobosa vel ovata aut breviter crasseque cylindracea, rotundata, semper integra, 10-12 μ longa, 8-10 μ lata;

setae mycelii copiosissimae, rigidae, basi saepe geniculatae, ad apicem acutae, atrae, opacae, 60-100 μ longae, inferne 6-7 μ crassae; perithecia dense aequaliterque disposita, ovato-globosa, 50-80 μ alta, 40-60 μ lata, extus primitus atra et muco, dein evanido, obtecta, pariete dein hystolisis ope in hyphas 58-80 μ longas 3-4 μ crassas flavo-brunneolas dissoluto, monascigera; asci ovati, 40-60 × 35-50, octospori, aparaphysati; sporae ellipsoideo-oblongae, utrinque rotundatae, medio septatae et valde constrictae, loculis tandem secedentibus, in maturitate atrae, opacae, constrictae, 27-32 × 12-13 μ

Hab. in foliis indeterm. verisimiliter Sapindaceae cujusdam, prov. Rizal Ins. Luzon, Philipp. (M. Ramos).

Subfam. 4. Perisporieæ

Dispositio sec. Theissen et Sydow, Ann. Myc. XV, 1917, p. 457 (Perisporiaceae Fr.).

A. Perithecia v. mycelium innata

I. Perithecia subepidermica; asci polyspori; sporidia hyalodidyma . . . . . 1. Pampolysporium Magn. = Polysporidium Syd.

II. Perithecia libera, hypostroma subcuticulare; sporidia phaeodidyma.

1. Perithecia singula . . . . . 2. Alina Rac.
2. Perithecia circa stroma sclerotiaceum gregaria . . . . . 3. Lasiobotrys Kze

III. Perithecia v. mycelium e stomatibus tantum orientibus.

1. Mycelium parce evolutum setulis destitutum; sporidia phaeodidyma, loculis inaequalibus . . . . . 4. Stomatogene Theiss.
2. Mycelium copiosum setulosum; sporidia ut supra . . . . . 5. Piline Theiss.

B. Perithecia et mycelium superficialia

I. Mycelium hyphopodiatum

1. Setulae nullae v. atypicae; perithecia e firma carbonacea; sporidia phaeophragmia (4-5 loc.). . . . . 6. Irene Theiss. et Syd.
2. Setulae praesentes

a) Setulae peristomales in statu pycnidico tantum praesentes; hyalosporus . . 7. Cleistosphaera Syd.

b) Setulae in peritheciis et mycelio praesentes; sporidia phaeophragmia (4-5 loc.) 8. MELIOLA Fries
= Myxothecium Kze

II. Mycelium exhyphopodiatum

1. Setulae praesentes

a) Sporidia hyalodidyma; mycelium simplex filamentosum . . . . . 9. DIMERIELLA Speg.

b) Sporidia phaeodidyma; mycelium ut supra 10. PHAEODIMERIELLA Sp. 1908
= Phaeodimeriella Th. 1912

c) Sporidia phaeophragmia (4-5 loc.); mycel. ut supra . . . . . 11. MELIOLINA Syd.

d) Sporidia brunnea unilocularia; hyphis mycel. ramulis setuliformibus stellatis praeditis . . . . . 12. TERATONEMA Syd.

2. Setulae nullae v. atypicae

a) Perithecia hyphis filiformibus tecta

α) Pili breves, sparsi; sporidia hyalodidyma . . . . . 13. RIZALIA Syd.

β) Pili longi, densi; sporidia phaeophragmia (4-loc.) . . . . . 14. HARAEA Sacc. et Syd.

b) Perithecia glabra

α) Sporidia hyalodidyma

*. Perithecia rubra, membranacea; asci globoso-ellipsoidei . . . 15. CHRYSOMYCES Theiss. et [Syd.

**. Perithe. nigra, e membran. coriacea; asci cylindraceo-clavati . 16. DIMERINA Theiss.

β) Sporidia phaeodidyma

*. Perithecia rubra, firma; asci globoso-ellipsoidei . . . . 17. PARODIOPSIS Maubl.

**. Perithecia nigra; asci cylindraceo-clavati . . . . . 18. DIMERIUM Sacc. et Syd.

γ) Sporidia phaeophragmia (3-loc.) mycelium pilis erectis praeditum; perithecia membranacea . . . . . 19. PERISPORINA P. Henn.

Genera dubia:

Sporidia hyalina continua: *Meliolopsis* Sacc.
Sporidia hyalina continua trigona: *Micromastia* Speg.
Sporidia hyalodidyma: *Eudimeriolum* Speg.
Sporidia brunnea continua: *Orbicula* Cooke

Genera removenda:

Winteromyces Speg. (W. caespitosus (Wint.) Speg.) = Gibbera Mikaniae (P. Henn.) Rick et Theiss.
Mycogala Rost. = Aspergillaceae
Dimerosporium Fuck.

Schenckiella P. Henn. = Agyrieae
Argynna Morg.
Parodiella Speg. = Pseudosphaeriaceae
Neorhemia v. Höhn. = Sphaeriaceae
Acanthostoma Th. = Sphaeriaceae
Scyphostroma Starb.
Maireella Syd. = Dothideaceae
Cleistotheca Zuck. = Pleospora
Perisporiella P. Henn. = Hypocrella
Pleomeliola Sacc.
Saccardomyces P. Henn. = Hypocreaceae v. Sphaeriaceae
Ferrarisia Sacc. = Microthyriaceae (= ? Seynesia Ipomoeae Syd.)
Ophiomeliola Starb. = Pseudosphaeriaceae

Sect. 1. Hyalosporae

*) **APIOSPORIUM** Kunze — Syll. I p. 30, IX p. 375, XVI p. 408, XVII pag. 531.

1. **Apiosporium atrum** Massee, Bull. Bot. Gard. Kew, 1913, p. 104.— 4270
Mycelio plagulas atras suborbiculares, saepe confluenti-irregulares, velutinas, matrici arcte adnatas efformante; peritheciis centro plagularum densissime aggregatis, udis globosis, siccis cupulato-collapsis, 200-300 μ diam., basi setulis cinctis, contextu indistincto atro; ascis ovatis, deorsum in pedicello longissime productis, polysporis; sporidiis cylindraceis, hyalinis, continuis, 9-12 × 2-2,5. Adest quoque status pycnidicus.

Hab. in ramulis dejectis (« Para rubber trees » dicti), Kuala Lumpur, Malay States (C. K. Bancroft). — Affine *A. australi* Speg.

CLEISTOSPHAERA Syd., Ann. Mycol. 1916, p. 74 (Etym. *cleistos* clausus et *sphaera*). — Perithecia minuta, in mycelio superficiali ex hyphis fuscis hyphopodiatis composito nidulantia, globosa, astoma, atra membranaceo-coriacea, parenchymatice contexta, glabra. Asci ovati vel saccati, 8-spori, aparaphysati, sporidia, ellipsoidea, continua, hyalina. — Cum gen. *Meliolopsis* Sacc. comparandum, Syll. I p. 25 et 68, IX p. 375, XXII p. 31.

1. **Cleistosphaera macrostegia** Syd., l. c. p. 75 fig. 1. — Hypophylla, fo- 4271
liola omnino vel fere omnino obtegens; mycelio ex hyphis fusco-

*) Sec. Theissen et Sydow, Ann. Mycol. 15., 1917, p. 483, gen. hoc reiciendum et ob spec. typ. *Apiosp. Salicis* Kze., ut fungum imperfectum habendum.

brunneis 6-8 μ crassis, rectis vel subrectis vix vel parum ramosis remote septatis (articulis 20-60 μ longis) tenue tunicatis; saepe composito; hyphopodiis paucis, continuis, sessilibus, valde variabilibus, saepe lobatis, usque 28 μ longis, peritheciis in mycelio dense sparsis usque gregariis, superficialibus, globosis, astomis, 120-160 μ diam., grosse parenchymatice fusce contextis, cellulis 15-20 μ haud raro etiam usque 25 μ diam.; ascis ovatis vel saccatis aparaphysatis, basi in stipitem brevem attenuatis, 65-80 × 25-30, octosporis; sporidiis di-tristichis, ellipsoideis, utrinque obtusis, intus nubilosis, hyalinis, 21-23 × 10; pycnidiis simul praesentibus, ovato-globosis usque globosis, 60-105 μ diam., parenchymatice ex cellulis minutis, 4-5 μ diam. dilute fuscis contextis, poro erecto distincto 15-20 μ lato ex duabus seriebus cellularum obscure brunnearum crassius tunicatarum composito praeditis, circa porum setulis parcis continuis obtusis dilute brunneis apicem versus subhyalinis, 20-30 × 3,5-4,5 obsitis; sporulis ellipsoideis, continuis, flavidulis v. pallide flavo-brunneolis, minute 1-2-guttulatis, 5-6,5 × 2,5-3.

Hab. in foliis Piptadeniae sp. (?) (Leguminosae), Seringal, Auristella, Rio Acre, Peruviae (E. Ule).

EPIPHYMA Theissen, Verh. zool.-bot. Ges. Wien, Bd. 66., 1916, p. 306, Ann. Mycol. 14., 1916, p. 404. — Est *Parodiella* hyalospora. — Typ. gen. *Epiph. laurinum* (Cke) Th. (= Phyllachora laurina Cke., Ph. mexicana Sacc., Ann. Myc. 1913, p. 547); *Epiph. anceps* (v. H.) Th.

1. **Epiphyma neurophilum** Theissen, Ann. Mycol. 14., 1916, p. 404. — 4272
Hypophylla. Peritheciis opace nigris, subgloboso-turbinatis, subepidermicis, secus nervos seriatis, 350-400 μ cr., basi 140 μ latis; contextu stromatico 35 μ cr.; ascis cylindraceo-clavatis, supra parietibus crassis praeditis, parte sporifera 130-150 × 12, pedicello usque 80 μ longo, octosporis; sporidiis monostichis obtuse rotundatis, hyalinis, unilocularibus 18-20 × 8-10. — Perithecia setulosa.

Hab. in foliis Tibouchinae sp. (Melastomataceae), prope Medellin Columbia (E. Mayor).

2. **Epiphyma Premnae** Syd., Ann. Mycol., 15., 1917, p. 217. — Stromata 4273
perithecioidea, superficialia, hypostromate epidermali suffulta, epiphylla, plagulas orbiculares 1-1,5 cm. latas tandem saepe confluentes formantia, in hypophyllo contraposito maculas fuscidulas indeterminatas efficientia, arctissime congregata, globulosa, saepe leniter depressa et in sicco umbilicata, astoma, 200-250 μ diam., pa-

renchymatice e cellulis atro-olivaceis vel atro-viridulis 6-8 μ diam. contexta, pariete crasso 30-50 μ, ad apicem saepe etiam crassiore; asci clavati, apice rotundati, breviter stipitati, 36-45 × 10-12, octospori; sporae distichae oblongae, continuae, utrinque rotundatae, rectae, biguttulatae, 10-12 × 3-4.

Hab. in foliis Premnae Cumingianae (Verbenaceae), Los Baños, Laguna, Ins. Philipp. (C. F. Baker).

Sect. 2. Phaeosporae

CHAETOMIDIUM Zopf. — Syll. I p. 39, IX p. 378, XXII p. 32.

1. **Chaetomidium barbatum** Traaen, Norw. in Nyt. Mag. Natuwid. Christiania 1914, p. 37, t. IV f. 5-8. — Mycelio peritheciis dense aggregatis viridibus aut fuscis tecto; hyphis repentibus et adscendentibus ramosis, septatis, hyalinis, 0,5-5 μ diam.; peritheciis ovoideis v. ellipsoideis v. ovatis, 50 μ ad 1 mm. altis, contextu tenui fragili piloso praeditis; pilis simplicibus, septatis, rectis v. undulatis v. tortuosis 2-4 μ cr., brevibus v. usque ad 1 mm. long. viridi-fuscis; ascis clavatis, apice rotundatis 24-60 × 9,5-14, 8-sporis, mox diffluis; sporidiis late ellipsoideis, utrinque brevissime apiculatis, 8-11 × 7-8, fusco-violaceis, concavo-convexis, e latere 4-5 μ cr. 4274

Hab. ad terram humosam pr. Christianiam in Norvegia. Ob peritheciis ostiolatis est *Chaetomium*, et *Ch. globoso*, pertinens (Cl. Traaen in litt.).

ASCOTRICHA Berk. — Syll. I p. 37.

1. **Ascotricha pusilla** (Ell. et Ev.) Chivers, Monogr. Chaetomium p. 220, tab. 17 fig. 13-21 (1915). — Ita vocandum *Chaetomium pusillum* Ell. et Ev. seu *Ch. Ellisianum* Sacc. et Syd. — Syll. XIV, 491. 4275

GUTTULARIA Obermeyer, Mycol. Centralbl. III (1913) p. 9 (Etym: *guttula*). — Perithecia sphaeroidea, initio pallida dein brunnea, excipulo pluristratoso praedita, fasciculos hypharum in hospiti hymenium immittentia sed mycelio distincto carentia. Asci aparaphysati sphaeroidei vel ovati, octospori. Sporidia ellipsoidea, utrinque attenuata, majuscula, unilocularia, demum fusco-brunnea. — Inter *Orbiculam* Cke. et *Pseudomeliolam* Speg. locandum; ad *Melanosporam* inter Hypocreaceas vergens.

1. **Guttularia Geoporae** Oberm., l. cit. — Peritheciis usque ad 250 μ diam., diu clausis dein prope apicem irregulariter fissis, excipulo 25-35 μ 4276

circ. crasso; ascis ovoideis, 80 × 40, tunica cito diffluente praeditis; sporidiis ellipsoideis, utrinque attenuatis, grosse guttulatis, 28-30 × 12-13, maturis fusco-brunneis.

Hab. parasitica in hymenio Geoporae graveolentis, Schwarzwald in Württemberg, Germania.

FERRARISIA Sacc., Notae Mycol. XXIII (Acc. Ven. Trent. 1917) (Etym. a cl. mycologo italico Th. Ferraris).—Perithecia globulosa, subiculo carentia, membranacea, nigricantia, ostiolo genuino nullo, sed demum late rimose hiantia, contextu grumoso indistincte celluloso. Asci ovoidei, aparaphysati, octospori. Sporidia ovoidea minuta, continua, fuliginea. — Notis datis a ceteris Perisporiaceis videtur distinctum genus.

1. **Ferrarisia philippina** Sacc., l. c. — Perithecis epiphyllis, dense maculiformiter gregariis, irregulariter globosis perexiguis, 45-55 μ diam., superficialibus, subiculo nullo insidentibus, vertice demum stellatim v. irregulariter rimosis, nigris; ascis in quoque perithecio paucis (3-6) ovato-ellipsoideis, sessilibus, 20 × 14-15, octosporis, aparaphysatis, sporidiis distichis, ovoideis, diu hyalinis dein fuligineis, 6 × 4,7, levibus, eguttalatis. 4277

Hab. in foliis subvivis Merremiae sp. (Convolvulaceae), Los Baños, Ins. Philipp.— Subiculo deficiente et fabrica sporidiorum mox distinguitur. Theissen et Sydow, Ann. Mycol. 1917, p. 416 et p. 467, contendunt hoc genus cum *Seynesia Ipomoeae*, Microthyriacea sporidiis phaeodidymis triplo majoribus collidere! Cum exemplar meum non viderint, certe aliam rem sub oculis habuerunt, nec haec modus critice est laudandus (P. A. Saccardo in ms.).

TERATONEMA Sydow, Ann. Mycol. 15., 1917, p. 180 — Mycelium effusum, compactum, tomentosum, atrum, subcrustaceum, ex hyphis cornicularifformibus ramosis (ramis repetito asteroideo-aculeatis) compositum; perithecia superficialia, globoso-conoidea, parenchymatice contexta, coriacea, saepe ad verticem setis paucis fasciculatis obsita, alibi levia, glabra, atra, astoma (ut videtur); asci minuti, clavulati, facilline diffluentes, octospori, aparaphysati; sporae continuae, minutae, hyalinae, tandem ut videtur fuscae. 4278

Huc pertinet, sec. Sydow, *Asterula cornicularifformis* P. Henn. (Syll. XIV p. 692) = *Orbicula Richenii* Rich., Syll. XVII p. 533.

Sect. 3. Hyalodidymae

DIMEROSPORIUM Fuck. — Syll. I p. 51, IX p. 401, XI p. 257, XIV p. 466, XVI p. 408, XVII p. 533, XXII p. 33. — Sec. Theissen et Sydow, Ann. Myc. 15., 1917, p. 421, gen. hoc idem est ac *Asterina* Lév. et tunc ad Microthyriaceas adscribendum.

1. **Dimerosporium agavectona** Pat. et Har., Bull. Soc. Mycol. Fr. 1912, p. 282 (corr. *agavectonum*). — Maculis praecipue hypophyllis, orbicularibus, sparsis confluentibusve, 5-30 mm. latis cinereo-atris, ex hyphis subsuperficialibus, radiantibus, tenuissimis, 4-5 μ crassis, ramosis, transverse septatis, hyphopodiis destitutis, laxissime intricatis, prostratis, substrato arcte-adnatis stomatum per orificium exeuntibus, constitutis; peritheciis subastomis dense gregariis, concoloribus, sursum rotundatis, ragosiusculis, deorsum applanatis 70-90 μ altis, centro in pedicellum aequilongum, cylindraceum, concolorem, stomatum cavitatem replentem abrupte attenuatis, contextu minute pseudoparenchymatico; ascis piriformibus, subsessilibus, apice rotundatis crassiusculeque tunicatis, 36-40 × 25, octosporis, aparaphysatis, jodi ope non coerulescentibus; sporis primitus hyalinis dein fusco-brunneis, elongatis, rectis, utrinque rotundatis una fine sensim attenuatis, transverse inaequaliter septatis, paululum constrictis, laevibus, 26 × 8. 4279

Hab. in foliis vivis Agaves Salmianae (Amaryllidaceae), quae valde necat, in montibus mexicanis regionis Tolucanae (Sierra de Tlalpujahna) 2400 met. inter et 2700 (Diguet).

2. **Dimerosporium bignoniicola** Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires XXIII p. 35 (1912). — Peritheciis sparsis vel pauci gregariis sessilibus vel brevissime crasseque subpedicellatis, ovato-subglobosis, 75-150 μ diam., atris, ostiolo prominulo saepe valide umbonato praeditis, glabris, udis turgidis, siccis collabescentibus, subiculo proprio destitutis, mycelio Meliolae insidentibus, contextu membranaceo, circa ostiolum compactiore et obscuriore; ascis cylindraceo-clavatis, breviter pedicellatis, 40-45 × 9-10, octosporis, paraphysibus filiformibus parum longioribus commixtis; sporidiis distichis, ellipsoideis, rectis vel leniter inaequilateris, 12 × 3, utrinque acutiuscule rotundatis, medio septatis, vix constrictis, hyalinis, non vel grosse guttulatis. 4280

Hab. in foliis vivis Bignoniae (Bignoniaceae) cujusdam in silvis, prope Bompland, Misiones: Argentina.

3. **Dimerosporium Cordiae** P. Henn, Hedw. vol. 48 (1908) p. 4. — Peritheciis epiphyllis, sparsis vel caespitosis, globulosis, atris, astomis, 60-90 μ diam., hyphis atrofuscis ca. 3 μ cr., apice palmatoramosis; ascis clavatis, apice rotundatis, tunicatis octosporis, paraphysatis, 35-53 × 10-12, sporidiis subdistichis, ovoideis, 1-septatis, constrictis, hyalinis, 10-12 × 4-4,5. 4281

Hab. in foliis Cordiae sp. (Borraginaceae). S. Paulo, Capital, Brasilia. — A *Dim. cordiicola* P. Henn. et *D. subpiloso* Wint. distinctum.

4. **Dimerosporium balsamicola** (Peck.) Ell. et Ev., N. A. Pyr. p. 728, Sacc., Ann. Myc. XIII n. 2 (1915) p. 113. — *Meliola balsamicola* Peck (1881), *Zukalia balsamicola* (Peck) Sacc., Syll. IX p. 432, *Asterella nuda* Peck (1885), *Cryptopus nudus* (Peck) Theiss. 4282

Hab. in foliis Abietis balsameae (Coniferae), Tupper Lake (House).

Obs. Perithecia atro-nitidula 80-90 μ d.; hyphae septatae 5-7 μ cr., guttulatae luteo-fuligineae; asci 38-40 × 9-12, octospori, paraphysibus diffluentibus cincti; sporidia disticha, oblonga, utrinque rotundata, 11-12 × 4, hyalina, 1-septata, leviter constricta.

5. **Dimerosporium Ingae** P. Henn., Hedw. vol. 48 (1908) p. 4. — Caespitulis epiphyllis, gregariis, atris, pulvinato-rotundatis, 1 mm. ca. diam., hyphis atro-fuscis, ramosis, septatis, 3-8 μ crassis, radiantibus, conidiis oblongo-cylindraceis vel clavatis, brunneis, medio 1-septatis, 40-60 × 8-10; peritheciis caespitosis, globulosis, atro-fuscis, cellulosis, 150-200 μ diam., ascis clavatis, apice obtuso-rotundatis tunicatis, octosporis, 70-85 × 23-30; sporidiis subtristichis vel conglobatis, oblongis, subfusoideis vel clavatis, medio 1-septatis, hyalinis, 40-52 × 7-8. 4283

Hab. in foliis Ingae sp. (Leguminosae), Serra da Cantareira, S. Paulo, Brasilia.

6. **Dimerosporium Parkinsoniae** Heald et Wolf, Mycologia, 1911, p. 5.— Myceliis effusis, ramosis, septatis, brunneis; conidiis atro-brunneis, uniformiter 1-4-locularibus; peritheciis gregariis, atris, subglobosis; ascis octosporis, 45-50 × 12-15; sporidiis inaequaliter biloculatis, guttulatis, hyalinis. 4284

Hab. in foliis, ramulis, raro in ipso cortice levigato ramorum Parkinsoniae aculeatae (Leguminosae), frequens, Texas Amer. bor. — Plagulas effusas fuliginosas efformat.

7. **Dimerosporium Strychni** P. Henn., Hedw. vol. 48 (1908) p. 5. — Maculis mycelii amphigenis, effusis, fuscis, radiantibus; peritheciis 4285

sparsis vel gregariis, globosis, astomis, atro-membranaceis, 90-100 μ diam.; ascis clavatis, obtusis, 8-sporis, paraphysatis, 26-35 × 8-10; sporidiis subdistichis, ovoideis, medio 1-septatis, hyalinis, 5-6 × 3.

Hab. in foliis Strychni (Loganiaceae), Capital, S. Paulo, Brasilia.

8. **Dimerosporium lussoniense** Sacc., Ann. Mycol. XII, 1914, p. 303. — 4286
Plagis epiphyllis adpressis, orbicularibus 1,5-2 mm. diam., interdum confluentibus et areas latas occupantibus, aterrimis, opacis ex hyphis radiantibus efformatis; hyphis filiformibus plerumque in fasciculos 15-20 μ cr. conglutinatis, leviter sinuosis non v. parce septatis, 3,5-4 μ crass.; peritheciis globulosis in centro plagae gregariis globoso-depressis, nigris, 176-200 μ diam., centro leviter umbilicatis, subastomis; ascis crasse cylindraceis, apice rotundatis, brevissime crasse stipitatis, 45-50 × 10-12, octosporis, paraphysibus guttulatis, crassiusculis obvallatis, octosporis; sporidiis distichis, oblongis, utrinque rotundatis, 11-12 × 3,6-4, medio septatis non v. vix constrictis, loculo inferiore lenissime angustiore, e hyalino dilutissime chlorinis, initio (?) velo tenuissimo mucoso obductis.

Hab. in foliis Pittospori sp. (Pittosporaceae), Bontoc, Bauco, Luzon (Lussonia) Ins. Philippin. (M. v. Overbergh).

9. **Dimerosporium albo-marginatum** Sacc., Notae Mycol. XXIV p. 2 (Bull. 4287
R. Orto bot. Nap. 1918). — Coloniis epiphyllis, dense sparsis, superficialibus, subcircularibus, 2-3 mm. diam., nigris, subiculo eximie albido-marginato insertis, subiculo margine ex hyphis filiformibus intertextis, radiantibus dilute ochraceis 80-95 × 1,5-2,5 subcontinuis (hyphopodiis nullis) formato; peritheciis hypothallo brunneo, hyphopodiis (?) globosis 12 μ diam. praedito insertis, globulosis, confertis, astomis 85-95 μ diam. glabris, contextu parenchymatico fuligineo; ascis clavato-fusoideis, aparaphysatis, 45-50 × 8, breviter stipitatis, apice obtusulis, octosporis; sporidiis distichis s. oblique monostichis, fusiformibus utrinque acutis, saepe curvatis, 16-17 × 2,4, hyalinis, medio 1-septatis non v. vix constrictis.

Hab. in foliis subvivis Sterculiae sp. (Sterculiaceae) in Horto bot. Singapore (Baker). — Eximia species peritheciis maculiformiter confertis nigris, halone thallino albido cinctis praedisticta. Ad quod genus neotericorum spectare possit haec species, A. nescit.

10. **Dimerosporium pelladense** P. Henn., Hedw. vol. 48 (1908) p. 4. — 4288
Caespitulis epiphyllis, gregariis, atro-crustaceis, rotundatis, usque ad 1 mm. diam.; hyphis repentibus atro-fuscis, 3-3,5 μ crassis; pe-

ritheciis lenticularibus, astomis, atro carbonaceis, 70-90 μ diam.; ascis clavatis, apice rotundatis tunicatis, octosporis, paraphysatis, 30-40 × 14-20; sporidiis subdistichis, ovoideis, hyalinis, medio septatis, 12-14 × 5-6.

Hab. in foliis Rubiaceae, Morro Pellado, S. Paulo, Brasilia.

DIMERINA Theiss., Beih. Bot. Centralbl. 29., 1912, Abt. II p. 46; Theissen et Sydow, Ann. Mycol. 15., 1917, p. 464. — Est *Dimerium* hyalodidymum.

1. **Dimerina Podocarpi** H. et P. Syd., Ann. Mycol. XI, 1913, p. 57. — 4289
Peritheciis hypophyllis, in mycelio parco vix visibili ex hyphis fuscidulis v. flavo-fuscis brevibus parce ramosis remote septatis 3-4 μ cr. composito superficialiter insidentibus, in costa acuum centrali sparsis v. subgregariis, globosis, atris, astomis, glabris, 120-160 μ diam., contextu opaco indistincte parenchymatico; ascis ovato-globosis, ovatis usque saccatis, apice valde incrassatis, 40-55 × 22-30, octosporis, aparaphysatis; sporidiis di-tristichis, ellipsoideo-fusoideis, utrinque leniter sed obtuse attenuatis, medio 1-septatis non constrictis, hyalinis, 20-24 × 8-9.

Hab. in foliis Podocarpi macrophylli (Coniferae), Kawanye-mura prov. Mino, Japonia (K. Hara).

2. **Dimerina samarensis** Syd., Ann. Mycol. XV, 1917, p. 198. — Epiphylla, 4290
plagulas minutas tenuissimas orbiculares formans, mycelium parce evolutum, ex hyphis flexuosis flavo-brunneis 2-2,5 μ crassis compositum; perithecia dense aequaliterque sparsa, exigua, globoso-conoidea vel conoidea, 50-70 μ alta, 40-55 μ lata, glabra, levia, fere astoma, parenchymatice e cellulis 5-7 μ diam. flavo-brunneis contexta; asci aparaphysati, saccati, octospori, 25-35 × 12-16; sporae plerumque distichae, oblongae utrinque obtusae, medio septatae et leniter constrictae, hyalinae, 11-13 × 4.

Hab. in foliis Malloti sp. (Euphorbiaceae), Catubing River, Samar, Ins. Philipp. (M. Ramos).

3. **Dimerina Jacquiniae** Ph. Garman, Mycologia v. VII, 1915, p. 337. — 4291
Maculis parvis, 0,25 μ diam., e peritheciis minutis, nigris, numerosis, circ. 10, efformatis; mycelio laxo, parum copioso, rubrido; peritheciis nigris, 48-60 μ diam.; ascis hyalinis, ovatis, 26,4 × 12; sporis angustis et hyalinis, 14,4-17 × 3,6.

Hab. in foliis Jacquiniae barbasco (Myrsinaceae), Mona Island Porto Rico.

4. **Dimerina monensis** F. L. Stevens, Bot. Gazette 69., 1920, p. 254, 4292

tab. XIV fig. 20.— Epiphylla raro hypophylla, effusa; mycelio superficiali, parco, obscuro, irregulari, hyphis 3 μ cr. ramulis tenuibus praedito, exhyphopodiato; peritheciis irregulariter sphaeroideis rugosis, 45-60 μ diam., astomis, in subiculo obscuro 10 v. ultra aggregatis v. confertis; greges usque 150-300 μ diam.; ascis numerosis, ellipsoideis obtusis, 34 × 17, octosporis; sporidiis inordinatis, hyalinis v. pallidissime fumosis, obtusis, bilocularibus, 13-16 × 3.

Hab. in foliis Jacquiniae barbasco (Myrsinaceae), Mona Island, Porto Rico. — Verisimiliter eadem est ac precedenti.

5. **Dimerina Graffii** Syd., Enum. Philipp. Fungi I, in Philipp. Journ. of Sci. VIII (1913) p. 269. — In mycelio Meliolae parasitica; hyphis tenuibus, Meliolae mycelium ambientibus, olivaceo-fuscidulis, vel viridulo-fuscidulis, ramosis, remote septatis, anastomosantibus, 1,5-2,5 μ latis; peritheciis densiuscule dispositis, globosis, atris, astomis, glabris, levibus, 40-130 μ diam., contextu firmo parenchymatico e cellulis 7-9 μ longis composito; ascis clavatis, vel crasse cylindraceis, apice obtusis, sessilibus, filiformiter paraphysatis, 25-35 × 12-15, octosporis; sporidiis distichis, oblongis, utrinque rotundatis, medio 1-septatis, non vel vix constrictis, hyalino-viridulis, 10-12 × 3-3,5, cellula superiore parum latiore. 4293

Hab. in mycelio Meliolae sp. ad folia Gmelinae philippinensis (Verbenaceae), Luzon, Prov. Bataan, Limay (P. W. Graff).

EUDIMERIOLUM Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires, XXIII, p. 36 (1912). — Perithecia superficialia, astoma, subiculo praedita, glabra. Asci paraphysati octospori. Sporidia didyma, hyalina.

1. **Eudimeriolum elegans** Speg., loc. cit., cum ic. — Peritheciis hypophyllis, minutis, sparsis, inter pilos prominulis, subiculo parcissimo ex hyphis chlorinis, 5-6 μ cr., parce ramulosis formato insidentibus, globosis vel globoso-depressis, 120-180 μ diam., irregulariter dehiscentibus, membranaceis; ascis cylindraceis, deorsum sensim leniterque attenuatis, vix pedicellatis, 60-70 × 8-10, paraphysibus filiformibus, tenuibus, parum longioribus copiose obvallatis; sporidiis ellipsoideo-elongatis, subfusoideis vel subclavulatis, medio septatis, non v. vix constrictis, hyalinis, per aetatem leniter chlorinis, 14-15 × 4-5. 4294

Hab. in foliis vivis Luehcae divaricatae (Tiliaceae), prope Puerto Léon, Misiones: Argentina.

DIMERIELLA Speg. — Syll. XXII, p. 37.

1. **Dimeriella annulata** P. et H. Syd., Ann. Mycol. X, 1912, p. 36.— Mycelio amphigeno, tenuissimo et parce evoluto, sed amoene in annulos concentricos evoluto et circulos $^3/_4$-1 cm. diam. efformante, ex hyphis tenuibus parce ramosis dilute brunneis hinc inde conidia sarciniformia transverse 3-septata longitudinaliter 1-septata dilute brunnea 12-17 µ longa 7-10 µ lata gerentibus composito; perithecis superficialibus globosis, atris, astomis, sub microscopio fuligineis, 50-100 µ diam., setis parcis rigidis atro-brunneis 50-120 µ long. et 4 µ cr. septatis obsitis, ascis subglobosis v. ovatis, 25-30 × 20-25, facile diffluentibus, octosporis; sporidiis ellipsoideis, utrinque rotundatis, 1-septatis et constrictis, diu hyalinis, tandem brunneolis, 17-24 × 8-12, loculis parum inaequalibus. 4295

Hab. in foliis Gymnosporiae sp. (Celastraceae), Bandoliez Kop, Zoutpansberg, Transvaal (E. M. Doidge).

2. **Dimeriella caraçaensis** A. Maublanc, Bull. Soc. Myc. de Fr. XXXVI, 1920, p. 34, tab. II, fig. 1-3. — Maculis epiphyllis, rotundatis, 3-8 mm. diam., saepe numerosis confluentibusque, atris fere lanuginosis. Hyphis repentibus, flavidis, plus minusve dense intricatis, flexuosis, saepe varicosis; peritheciis gregariis, nigro-opacis, globosis, 100-140 µ diam., poro pertusis, undique setis ornatis; setis numerosis, rigidis, obscure fuligineis, apice pallidioribus obtusisque, septatis, 4-6 µ crassis, perithecii diametrum superantibus; ascis late cylindricis, breviter attenuato-pedicellatis, sursum rotundatis, aparaphysatis, 45-65 × 12-15, 8-sp.; sporidiis distichis, subfusoideis v. oblongis, 1-septatis, leniter constrictis, cellula super. saepe paulo crassiori, hyalinis v. dilute fumosis, guttulatis, 14-18 × 5-5,5. 4296

Hab. in foliis vivis Baccharidis sp. (Compositae), Serra do Caraça, Brasilia (Herb. Mus. R. Jan.).

3. **Dimeriella erigeronicola** F. L. Stevens, Trans. Illin. Ac. of Sc., v. X, 1917, p. 166. — Superficialis, epiphylla, nigra, circulariter disposita 1-4 mm. diam.; mycelio copioso ex hyphis stramineis, sinuosis, 1,5 µ diam. septatis efformato; peritheciis nigris, numerosis, globosis, 64-102 µ diam. appendicibus numerosis (circ. 15), plerumque basilaribus mycelio conformibus obscurioribus 1,5-2 µ cr. sinuosulis septatis praedito; hostiolo minuto sed distincto; ascis cylindraceis, octosporis, obtusis, 31-34 × 7; sporis bilocularibus hyalinis v. flavidulis, 7 × 1-5; paraphysibus numerosis, tenuibus, filiformibus, sinuosis. 4297

Hab. in foliis Erigerontis spathulati (Compositae),

Quebradillas, Mannabo, Yauco, El Gigante, Maricao in Porto Rico, America bor.

4. **Dimeriella clavisata** Doidge, Trans. R. Soc. South Afr. V, 1917, p. 717 et 742, t. 57, fig. 3. — Epiphylla, maculas effusas efformans; mycelio ex hyphis flexuosis, septatis, fuscidulis, 3-5,5 μ crassis composito; peritheciis superficialibus, sparsis v. laxe gregariis, subhemisphaericis, atris, carbonaceis, 90-115 μ diam., praecipue basi v. in parte inferiore 9-15 setulis obsitis, setis septatis clavatis, 15-55 μ long., basi 3,5-7 μ crassis, ad apicem incrassatis, truncatis, diverse lobatis; ascis numerosis, paraphysatis, 8-sporis, sessilibus, cylindraceo-clavatis, apice rotundatis, 40-56 × 18-20; paraphysibus filiformibus, simplicibus, hyalinis; sporidiis conglobatis v. distichis, hyalinis, 1-septatis, subconstrictis 15-18 × 5-7. 4298

Hab. in foliis Vernoniae angulifoliae (Compositae), Winckle Spruit, Natal (E. M. Doidge).

5. **Dimeriella Olyrae** F. L. Stevens, Trans. Illin. Ac. of Sc., v. X, 1917, p. 167. — Superficialis epiphylla; maculis nullis; mycelio ex hyphis flavidis obscure brunneis, copiosis septatis, sinuosis 3-4 μ circ. cr., maculose aggregatis efformato; peritheciis numerosis, 51-68 μ diam., nigris rugosulis, astomis, setulis 1-4, 234-300 long. nigris, septatis ornatis; ascis ovoideis octosporis, 51-65 × 24, non paraphysatis; sporidiis inordinate dispositis, 17 × 7, 1-septatis hyalinis. 4299

Hab. in foliis Olyrae latifoliae (Graminaceae), Preston's Ranch, Maricao, Mayaguez, Porto Rico.

LASIOSTEMMA Theiss. et Syd., Ann. Mycol. 15., 1917, p. 218. — Mycelium superficiale, brunneum, septatum, ramosum exhyphopodiatum. Perithecia superficialia globosa apicem versus setulis fasciculatis raro sparsis praedita; apice obtuse papillata astoma; sporidia hyalodidyma. — Typus generis: *Las. melioloides* (Berk. et Rav. in Dimeriella) Th. et Syd.

1. **Lasiostemma Merrillii** Syd., Ann. Mycol. 15., 1917, p. 218. — Mycelium hypophyllum, parce evolutum, ex hyphis brevibus 3-3,5 μ crassis formatum, perithecia sparsa vel irregulariter aggregata, superficialia, globosa, 70-110 μ diam., parenchymatice e cellulis 5-7 μ diam. contexta, subopaca, obscure olivaceo-fusca, obtuse papillata, superiore parte praecipue a vertice setulis vel pilis longe radiantibus longis rectis vel subrectis subinde flexuosis flavo-brunneis 180-250 μ longis 3-4 μ crassis remote septatis (articulis 25-50 μ longis) obsita; asci quoad formam variabiles, mox breves et lati, mox angustiores 4300

sed elongati, 30-45 × 16-22 μ, aparaphysati, octospori, superne rotundati; sporae oblongae, utrinque rotundatae vel leniter attenuatae medio septatae, non constrictae, hyalinae, 20-25 × 4-6, plerumque distichae.

Hab. in foliis Radermacherae pinnatae (Bignoniaceae), Catubig River, Samar, Ins. Philipp. (M. Ramos).

2. **Lasiostemma cyathearum** (Syd.) Th. et Syd., Ann. Myc. 15., 1917, p. 218, *Dimeriella cyathearum* Syd., Enum. Philipp. Fungi II, in Philipp. Journ. of Sci. VIII (1913) p. 478. — Subiculo hypophyllo, superficiali, atro, velutino, crasso, ex hyphis 5-6 μ crassis, obscuris, remote septatis et vix vel parum ramosis composito; perithecciis superficialibus, globosis, astomis, 120-180 μ diam., ubique pilis subrectis vel flexuosis, obscure brunneis, remote septatis, 40-100 × 5-6 obsitis, contextu opaco e cellulis minutis 5-7 μ diam. parenchymatice composito; ascis clavatis, apice rotundatis, subsessilibus copiose paraphysatis, 60-70 × 14-16, octosporis; sporidiis distichis, oblongis, medio 1-septatis, non constrictis, hyalinis, 14-18 × 4-5, cellula superiore paullo latiore. 4301

Hab. in foliis Cyatheae caudatae (Cyatheaceae), Luzon, Prov. Laguna, Mt. Maquiling, Philipp. (Merrill).

ANTENNULARIELLA Woronichin, Les fumagines du Département de Sotshi, in Bull. of Applied Bot. VIII, n. 6, p. 771 (1915). — Absque diagnos.

1. **Antennulariella fuliginosa** Woronichin, l. c., tab. 136, fig. 945-961.— Mycelio brunneo, praecipue rectangulariter ramoso, crustas fuliginosas, usque 400-500 μ crassas, epiphyllas formante; cellulis hypharum cylindraceis, vel ad septa leviter constrictis (7)-12-16 × 6-8, guttulatis; pycnidiis globosis vel pyriformibus, contextu parenchymatico, diam. 30-45 μ, apice ostiolatis, in hyphis lateraliter vel terminaliter insidentibus; sporis hyalinis, ovalibus, 5 × 1,5; peritheciis globosis, 60-75 μ diam., contextu parenchymatico appendiculis filiformibus, 4-5 μ crassis praeditis; ascis ovalibus, brevissime pedicellatis, 27-30 × 11-12, aparaphysatis (?); sporis oblongo-ovatis, hyaliuis, 1-septatis, 10 × 3-4, cellula inferiore longiore. 4302

Hab. in foliis vivis Ilicis aquifolii L., Caucasus distr. Sotshi Gub. Tshernomorsk, socio *Chaetothyrio colchico* Woronichin.

Sect. 4. Phaeodidymæ

ZOPFIA Rabenh. — Syll. I p. 54.

1. **Zopfia Boudieri** Arnaud, Bull. Soc. Mycol. Fr. 1913, p. 255, t. XI f. A. et E.— Peritheciis sparsis, globosis, magnitudine variis, 0,5-1,25 mm. diam. rugulosis, nigris; ascis clavatis, ad basim vix attenuatis, apice rotundatis, magnitudine variis, plerumque 1-5-sporis; sporidiis magnis, plerumque medio septatis, constrictis, 40-52 × 25-32, vel rarius continuis (35-32 μ diam.) utrinque perfecte rotundatis, tuberculosis, atro-fuscis. 4303

Hab. ad radices Ligustri vulgaris, Montpellier, Gallia meridionalis.

WINTEROMYCES Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires, XXIII p. 37 (1912).— Etym. a cl. mycologo G. Winter. — Perithecia superficialia, astoma, setulosa, subiculo destituta. Asci octospori, paraphysati. Sporidia didyma, fusca. — A *Parodiella* peritheciis setulosis ascisque paraphysatis recedit.

1. **Winteromyces caespitosus** (Wint.) Speg., loc. cit., cum icon., *Parodiella caespitosa* Winter, Syll. IX p. 411. — Peritheciis in caespitulos orbiculares parvos, 1-2 mm. diam., dense 4-10 constipatis, e globoso obovatis, 200-250 μ diam., omnino superficialibus, nigris, astomis, pilis flexuosulis, atris, 50-100 × 4-6, per aetatem deciduis adspersis, coriacellis; ascis late clavatis, breviter pedicellatis, 65-80 × 18-25, paraphysibus paucis, filiformibus, conspicue longioribus obvallatis; sporidiis subconglobatis, ovoideo-ellipsoideis, medio septatis et vix constrictis, diu hyalinis dein fumosis, postremo fuscidulis. 4304

Hab. etiam in foliis vivis Mikaniae cordifoliae in silvis prope Bompland, Misiones: Argentina. — Sec. Theissen et Sydow, Ann. Mycol. 15., 1917, p. 133 et p. 466, *Wint. caespitosus* = *Gibbera Mikaniae* (P. H.) Rick et Theiss.

*) **PARODIELLA** Speg. — Syll. I p. 717, IX p. 409, XI p. 260, XIV p. 469, XVI p. 412, 1124, XVII p. 541, XXII p. 41.

1. **Parodiella congregata** P. et H. Syd., Ann. Mycol. X, 1912, p. 37.— Peritheciis epiphyllis, globosis, minutissimis, 60-100 μ diam., dense 4305

*) De hoc gen. cnfr. Theissen et Sydow, Ann. Mycol. 14., 1916, p. 125.

confertis et greges minutos rotundatos 1-4 mm. latos Doassansiae ad instar efformantibus, basi lenissime immersis, astomis, minute parenchymatice contextis, atris, contextu sub microscopio primitus olivaceo-coeruleo tandem plus minus brunneo et subopaco; ascis quoad formam et magnitudinem ludentibus, mox ovatis v. subglobosis ca. 30-40 × 20-30, mox elongatis saccatis 50-65 × 15-20, sessilibus, apice incrassatis, paraphysibus indistinctis, octosporis; sporidiis di-tristichis, v. conglobatis, elongatis, 1-septatis, haud constrictis, olivaceis, 26-30 × 6-7,5, cellula superiore plerumque paullo breviore sed latiore.

Hab. in foliis vivis Limnanthemi Thunbergiani (Gentianaceae) Belfast Transvaal (E. M. Doidge).

2. **Parodiella reticulata** (Ell. et Ev.) Theiss. et Syd., Ann. Mycol. 1917, 4306
p. 130, *Parod. grammodes reticulata* Ell. et Ev. in schedis. — Peritheciis epiphyllis secus costam nervosque folii dense bifariam seriatis, e mutae pressione depressis, atro-nigricantibus, verruculosis, 200-250 μ diam.; ascis breviter stipitatis, clavatis, p. sp. 100-115 μ, octosporis; sporidiis distichis, griseo-brunneis, tenui-tunicatis, oblongis, leviter constrictis, utrinque non conico-tenuatis, 26 × 8.

Hab. in foliis Chapmaniae floridanae (Leguminosae), Eustis Florida, Amer. bor. (Nash).

3. **Parodiella perisporioides** (B. et C.) Speg. — Syll. I p. 717 — var. **microspora** Th. et Syd., Ann. Mycol. 1917, p. 129. — Epiphylla, aequaliter distributa, discreta; peritheciis 200-250 μ diam., minute papillatis, glabris, aetate collebascendo plano-scutellatis; ascis 80-90 μ long., p. sp., saepe tantum 6-sporis; sporidiis 25-27 × 8-9, rarius 30-32 μ long.; cetera typ. 4307

Hab. in foliis Indigoferae flaccidae (Leguminosae) in Amer. bor. — var. **tasmanica** Th. et Syd, l. c. — Peritheciis densis incrustantibus, sectione quam in typo paullo mollioribus et pallidioribus, brunneis, superficie asperulis, 200-250 μ diam.; ascis 100-120 μ p. sp.; sporidiis 27-28 × 9, saepe etiam 32 μ usque. —

Hab. in foliis Desmodii tasmanici (Leguminosae), Victoria Australiae (Mueller).

4. **Parodiella Griffitshii** Th. et Syd., Ann. Mycol. 1917, p. 131. — Epi- 4308
phylla, folii superficiem incrustans; peritheciis asperulis, 130-160 μ diam.; ascis breviter stipitatis, p. sp. 110-130 μ, elongato-clavatis; sporidiis distichis, elongato-fusoideis, medio septatis, leviterque constrictis, tenui-tunicatis, laete griseo-brunneis, utrinque sensim leviterque tenuatis, valide biguttatis.

Hab. in foliis Psoraleae tenuiflorae (Leguminosae), Montana Billings in Amer. bor. (GRIFFITSH). — Peritheciis minutis et sporidiorum notis valde distincta species.

5. **Parodiella Spegazzinii** Th. et Syd., Ann. Mycol. 1917, p. 131. — Peritheciis epiphyllis, folii superficiem incrustantibus, asperatis, 160-200 μ diam., facile deciduis, fragilibus, saepe in folii cavitatem hemisphaericam relinquentibus; ascis clavatis, breviter stipitatis, p. sp. 100 × 16-19, saepe elongatis 155 × 13 usque; sporidiis distichis, v. (in ascis angustioribus) monostichis, 20-26 × 10; coetera *P. perisporioidis*. 4309

Hab. in foliis vivis Rhynchosiae Sennae (Leguminosae), Bagnado S. Josè de Flores Argentina (Spegazzini, sub *P. perisporioide*). — var. **Kilimandscharica** Th. et Syd., l. c. — Foliis in epiphyllo omnino nigro-incrustatis, a basi ad apicem; peritheciis 150-200 μ diam.; sporidiis 28-29 × 9. — In foliis Crotalariae sp. (Leguminosae), Kilimandscharo, Afr. orient.

HYPOPLEGMA Theiss. et Sydow, Ann. Mycol. 14., 1916, p. 135. — A *Parodiella* differt mycelio membranaceo, superficiale, ex hyphis liberis efformato, in stomatibus radicato, perithecia ferente; ab *Apiosporina* v. Höhn. sporidiis loculis aequalibus praeditis. — Typ. gen. *Parodiopsis viridescens* (Rehm, ut Parodiella) Maublanc, et tunc *Hypoplegma viridescens* (Rehm) Th. et Syd. vocandum. 4310

LASIOBOTRYS Kunze. — Syll. I p. 29, IX p. 374.

1. **Lasiobotrys hispanica** Theiss. et Syd., in Theissen, Ann. Mycol. 16., 1918, p. 177. — A *Lasiobotrys Lonicerae* Kze et *L. affinis* Harkn. differt praecipue hypostromate hyalino nec nigro-brunneo. — Sclerotiis adpressis epiphyllis 220-250 μ latis, hypostromate innatis emergentibus, intus albis, cellulis 8 × 6, ambitu indistincto mucoso; peritheciis 60 × 50, brunnescentibus parum distinctis. Immaturus. 4311

Hab. in foliis Loniceraе arboreae, Sierra Nevada, Hispania (PORTA et RIGO).

2. **Lasiobotrys Butleri** Theiss. et Syd. in Theissen, Ann. Mycol. 16., 1918, p. 177. — *Lasiobotrys Lonicerae* Syd. et Butl., l. c., 1911, p. 384 p. p. — A *Lasiobotrys Lonicerae* Kze et *L. affinis* Harkn. differt praecipue hypostromate hyalino nec nigro-brunneo. — Sclerotiis arcte adpressis epiphyllis, superficiem minute granulosam efformantibus, 150-200 μ cr., intus albo-virentibus; cellulis exagonis, 4312

13 μ latis; perithecis parvis, 50-55 × 40, parietibus indistinctis praeditis; immaturus.

Hab. in foliis Loniceraae sp., Bkowali, Naini-Tal, Indiae or. (E. J. Butler).

DIMERIUM Sacc. et Syd. — Syll. XVI, p. 410, XVII p. 537, XXII pag. 38.

1. **Dimerium intermedium** P. et H. Syd., Ann. Mycol. X, 1912, p. 37.— 4313
Perithecis epiphyllis, in mycelio Meliolae quaedam parasiticis, hyphis parcissime evolutis, aggregatis, ovatis usque globosis, atris, superne angustatis papilliformiter productis et poro pertusis 90-150 μ diam.; ascis fasciculatis, numerosis, clavato-cylindraceis, 32-38 × 8-10, sessilibus, octosporis; sporidiis distichis, subfusiformibus-1-septatis, non v. vix constrictis, diu hyalinis, tandem flavo-brunneis, 7-10 × 3-3,5, loculo supero latiore; paraphysibus ascos paullo superantibus, filiformibus, numerosis; pycnidiis perithecis similibus, sed minoribus; sporulis ellipsoideis, continuis, hyalinis, 2-guttulatis, 5,5-8 × 3-4.

Hab. parasiticum in Meliola quadam ad folia Isoglossae Woodii (Acanthaceae), Amanyimtote, Natal (E. M. Doidge). — *Dim. myriadeo* (Cke.) Theiss. affinis sed differt ascis latioribus, coeterum etiam robustior.

2. **Dimerium (Phaeostigme) Ramosii** Syd., Ann. Mycol. 1917, p. 200.— 4314
Mycelium hyphas Asterinae dense amplectens, ex hyphis olivaceis vel olivaceo-brunneolis 2-3 μ latis flexuosis dense intricatis ramosis et anastomosantibus septatis compositum; perithecia superficialia, globosa 80-100 μ diam., ostiolo typico carentia, glabra, atro-olivacea, opaca, parenchymatica e cellulis 5-6 μ diam. composita; asci fasciculati, paraphysati, sessiles vel subsessiles, ventricosi, 25-35 × 13-16, octospori; sporae 2-3-stichae, oblongae vel clavulatae, circa medium septatae, non vel leniter constrictae, intense olivaceo-brunneae, 12-16 × 3-3,5, loculo supero plerumque breviore sed paullo latiore.

Hab. in mycelio Asterinae sp. vetustae, ad folia Dasymaschalonis clusiflorae (Anonaceae), prov. Bataan, Luzon, Philipp. (M. Ramos). — Gen. *Phaeostigme* Syd., l. c. p. 199, a *Dimerio* paraphysibus praesentibus tantum differt.

3. **Dimerium Stevensi** Ph. Garman, Mycologia v. VII, 1915, p. 337.— 4315
Maculis forma irregularibus, 1 mm. v. ultra diam., perithecis sphaeroideis, nigris, nitidis, 100 μ diam.; ascis clavatis, 42-50 × 20-22;

sporidiis leniter chlorinis, quandoque obscurioribus, bilocularibus, 16-20 × 6-8; paraphysibus copiosis.

Hab. in foliis Cordiae corymbosae (Borraginaceae), Quebradillos, « College Grounds », Mayaguez, Maricao, Porto Rico, Amer. Centr.

4. **Dimerium scabrosum** Syd. in Leaflets of Philipp. Bot. V (1912) 431
p. 1534. — Hypophyllum, plagulas orbiculares 3-8 mm. latas, atras efformans, in mycelio Asterinae parasitans; mycelio densissime intertexto, ramosissimo, ex hyphis 3-5 μ crassis, fuscis composito; peritheciis in mycelio superficialibus, globosis, astomis, atris, rugulosis, in sicco collapsis, 130-160 μ diam.; ascis saccatis usque fusoideo-clavatis, apice leniter incrassatis, sessilibus, 38-45 × 14-16, octosporis; paraphysibus numerosissimis, filiformibus, ascos superantibus; sporidiis 2-3-stichis, cylindraceis, utrinque obtusis, medio 1-septatis, saepe leniter constrictis, ex hyalino fusco-brunneis, dense distincteque verrucosis, 15-22 × 3,5-4,5, loculis minute guttulatis.

Hab. parasiticum in mycelio Asterinae ad folia Canarii polyneuri (Burseraceae), Brooks Point, Palawan, ins. Philipp.— Ob sporidia cylindracea et distincte verrucosa statim dignoscenda.

5. **Dimerium pseudoperisporioides** Rehm, Ascomyc. Philipp. II, in Phi- 431
lipp. Journ. of Sci. VIII (1913) p. 254. — Peritheciis in medio macularum epiphyllarum, orbicularium, nigritularum, 0,5-1 cm. diam. densissimis, versus marginem sparsis, sessilibus, globulosis, nigris, glabris, ad basim hyphas nonnullas brevissimas fuscidulas 3-5 μ cr. gerentibus, haud ostiolatis, 100 μ diam.; ascis 5 vel 6, globoso-ovoideis, usque ad 35 μ latis, octosporis, paraphysibus gelatinosis intermixtis; sporidiis oblongis vel subclavatis, utrinque obtusis, medio septatis et constrictis, subfuscis, 10-12 × 5-6.

Hab. in foliis Ipomoeae (Convolvulaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (C. J. Baker). — Species reicienda secundum Sydow, Ann. Myc. 1917, p. 239.

6. **Dimerium Cayaponiae** Ph. Garman, Mycologia v. VII, 1915, p. 335, 431
tab. CLXXI fig. 5. — Maculis nigris, fuligineis, epiphyllis, forma irregularibus, usque 3 mm. et ultra diam.; peritheciis nigris, globosis, 0,12 mm. diam.; ascis lineari-clavatis, octosporis, 33,6-36 × 2,4; sporidiis bilocularibus, obscuris, fumosis, loculo altero angustiori, 7,3-9,6 × 3,6-5.

Hab. in foliis Cayaponiae americanae (Cucurbitaceae), Utuado Porto Rico, America Centr. — Sec. Ph. Garman, hoc genere spectant etiam *Dothidea grammodes* Berk. et *Sphaeria me-*

lioloides Berk. et Curt.

7. **Dimerium Tayabense** H. S. Yates, The Philipp. Journ. of Sc. Bot. 13., 1918, p. 362. — Mycelio ex hyphis tenuibus ramosis subhyalinis ca. 2 μ cr. composito; peritheciis globosis vel ovoideis, 45-55 μ diam., astomis, membranaceis, obscure brunneis, pseudoparenchymaticis; setis paucis (6-12), brunneis, septatis, ca. 20 μ longis; ascis numerosis, subclavatis, octosporis, 40 × 12; sporidiis distichis, brunneis, ovoideo-oblongis, 1-septatis, constrictis, loculo superiore latiore, 10-12 × 2. 4319

Hab. parasiticum in mycelio Asterinae et Meliolae in foliis Momordicae (Cucurbitaceae), Mount Binuang Tayabas Prov., Luzon Ins. Philipp. (Ramos et Edaño).

8. **? Dimerium japonicum** H. et P. Syd. et Hara in H. et P. Syd., Ann. Mycol. X, 1912, p. 406.— Mycelio in Meliola parasitico, hyphas Meliolae densissime ambiente et rete densissimum efformante, ex hyphis fuscidulis saepissime anastomosantibus 3-4 μ cr. vix septatis composito; peritheciis globosis gregariis, atris, ostiolo pertusis, glabris, 80-130 μ diam., contextu peculiari, aegre perspiciendo ex cellulis minutissimis composito; ascis clavatis v. cylindraceo-clavatis, obtusis paraphysatis, 35-40 × 10-12, octosporis; sporidiis distichis, oblongis v. subfusoideis aut cylindraceis, utrinque plerumque lenissime attenuatis, sed apicibus obtusis, medio 1-septatis et leniter constrictis, fusco-brunneis, 14-17 × 4-5; pycnidiis eadem forma et magnitudine ac peritheciis; pycnidiosporis ellipsoideo-oblongis, dilute fuscis, continuis, biguttulatis, 7-9 × 3-4, utrinque obtusis. 4320

Hab. parasiticum in Meliola quadam ex affinitate M. amphitrichae ad folia Arundinariae Narihizae var. Yashadake (Graminaceae), Tokyo, Japonia (K. Onuma).

9. **Dimerium Mori** (Y. Endô) Sacc., *Dimerosporium Mori* Y. Endô, Journ. Seric. Ass. Jap. 1917, p. 300 fig. B (p. 288). — Peritheciis majusculis, ellipsoideis, 110-120 μ altis, 130-140 μ latis, exappendiculatis, atro-brunneis; contextu laxe celluloso, cellulis pluri-guttulatis; ascis numerosis, clavatis, tenui-tunicatis, 60-70 × 12-15, octosporis; sporidiis distichis, oblongis, utrinque acutulis, 7-8 × 5-7; flavo-brunneis, 1-septatis, loculis guttulas 1-2 refringentes includentibus. 4321

Hab. in foliis Mori albae, socia Meliolae specie, Ueda, Tokida Japoniae.

10. **Dimerium singaporense** Sacc., Notae Mycol. XXIV p. 3 (Bull. R. Orto bot. Napoli 1918). — Coloniis epiphyllis, sparsis v. subgre- 4322

gariis, subcircularibus, 2-3 mm. latis, opace nigricantibus, adpressis ex hyphis subradiantibus, parce ramosis, subcontinuis, 3-4 μ cr., guttulatis, brunneis, hinc inde inflatulis formatis; conidiis saepius pleurogenis, clavatis, 3-septatis non constrictis brunneis, 25-30 × 4,5-5, longiuscule pedicellatis; perithecis in centro coloniae paucis, globoso-depressis, 150-200 μ diam., nigris, astomis, nudis; contextu dense celluloso, parum distincto, solidiusculo, fuligineo; ascis fusoideis, breviter tenuato-stipitatis, apice obtusulis, aparaphysatis (?), 35-40 × 14, octosporis; sporidiis subtristichis, fusoideis, utrinque imprimis apice obtusulis, medio 1-septatis, leviter constrictis, 18-20 × 4,5, dilute fuligineis, saepe inaequilateris.

Hab. in foliis emortuis Rhodomyrti tomentosae (Myrtaceae), Reservoir Woods, Singapore (Baker). — Affine *D. paulensi* (P. Henn.) Sacc. aliisque sed distingui potest.

11. **Dimerium Solani** P. Henn., Hedw., vol. 48 (1908) p. 5. — Caespitulis epiphyllis, rotundatis, sparsis vel gregarie confluentibus, atris; perithecis gregariis in hyphis Meliolae parasiticis, globulosis, atris, cellulosis, 60-100 μ diam.; ascis clavatis, obtusis, paraphysatis, octosporis, 40-50 × 7-10; sporidiis oblique monostichis vel distichis, ovoideis vel ellipsoideis, medio 1-septatis, haud constrictis, fuscobrunneis, 8-11 × 3-4. 4323

Hab. in foliis Solani grandiflori (Solanaceae) ad Meliolam parasiticum, Morro Pellado, S. Paulo, Brasilia.

12. **Dimerium (Phaeostigme) Clemensiae** Syd., Ann. Mycol. 15., 1917, p. 200. — In Asterina quadam parasitica; mycelium ex hyphis tenuibus subhyalinis flavidulis vel viridulis 2-3 latis copiosis compositum; perithecia gregaria, globoso-conoidea, 80-140 μ diam., ostiolo typico carentia, parenchymatice e cellulis flavo-brunneis 4,5-7 μ diam. contexta; asci sessiles, clavato-cylindracei, 38-48 × 12-15, octospori, paraphysati; sporae distichae, oblongae, medio septatae, vix vel leniter constrictae, utrinque rotundatae, in maturitate intense fuscae, 12-15 × 4,5-6,5, leves. 4324

Hab. parasitica in Asterina quadam valde vexata, ad folia Solani torvi (Solanaceae), Pauai, Benguet, Ins. Philipp. (Mary Strong Clemens).

13. **Dimerium Wattii** Syd. et Butl., Ann. Mycol. IX, 1911, p. 383, tab. XVII fig. 4-11. — Perithecis plerumque epiphyllis, in crustis Asterinae Camelliae insidentibus et probabiliter in eis parasitice vigentibus, minutis, globosis v. ellipticis, collo leniter prominulo apertis, globosis 50-60 μ diam. v. elliptico et ca. 80 × 45; 4325

ascis cylindraceo-clavatis, 33 × 10, octosporis, aparaphysatis; sporidiis oblique distichis, 1-septatis et leniter constrictis, brunneis, 7 × 3,5, cellula superiore latiore; pycnidiis simul praesentibus eadem magnitudine ac peritheciis, difformibus, aliis lageniformibus collo distincto praeditis, aliis globosis et pilis rigidis atris opacis continuis acutis circa porum obsitis; pycnidiosporis continuis, oblongis v. ellipsoideis, hyalinis, 4,5-6,5 × 2,5-3,5; conidiis numerosis, falcatis, 3-septatis, 70-90 × 25, cellulis extimis hyalinis, duabus interioribus brunneis (? *Dimerium*).

Hab. parasiticum (ut videtur) in crustis Asterinae Camelliae ad folia Camelliae Theae (Theaceae), Dunmur Dullung, Sibsagar Distr. Assam, Indiae orient. (G. Watt), Darjeeling (Mc Rae).

14. **Dimerium Celtidis** P. Henn., Hedw. vol. 48 (1908) p. 5. — Caespitulis hypophyllis, gregariis, rotundato-pulvinatis, atris, crustaceis, 1-3 diam.; peritheciis gregariis, subgloboso-collapsis, cellulosis, atrofuscis, pertusis, 90-120 μ diam.; ascis cylindraceo-clavatis, obtusis, octosporis, 40-60 × 4-5,5; sporidiis oblique monostichis vel subdistichis, ovoideis vel ellipsoideis, medio 1-septatis, fuscidulis, 5-7 × 3. 4326

Hab. in foliis Celtidis glycycarpae (Ulmaceae), Serra da Cantareira, S. Paulo, Brasilia.

15. **Dimerium rizalense** Syd., Ann. Mycol. 15., 1917, p. 198. — Mycelium parce evolutum, ex hyphis tenuibus 2-2,5 μ latis olivaceo-fuscidulis compositum; perithecia gregaria, superficialia, globosa, fere astoma, 75-90 μ diam., glabra, parenchymatice e cellulis 6-9 μ diam. obscure olivaceo-brunneis contexta; asci aparaphysati, sessiles, cylindracei vel cylindraceo-saccati, 26-36 × 9-11, octospori; sporae distichae, oblongae vel obclavatulae, intense olivaceo-brunneae, medio septatae, leniter constrictae, leves, 11-13,5 × 3-4, cellulis serie aequalibus, serie superiore leniter latiore sed breviore. 4327

Hab. parasiticum in mycelio Asterinae pusillae, ad folia Premnae sp. (Verbenaceae), prov. Rizal, Luzon, Philipp. (M. Ramos).

PHAEODIMERIELLA Spegaz. — Syll. XXII p. 37. — *Phaeodimeriella* Theiss., Beih. Bot. Centralbl. 29., Abt. II, 1912, p. 46.

1. **Phaeodimeriella (Chaetostigmella) papillifera** Syd., Ann. Mycol., 15., 1917, p. 201. — In Meliola quadam parasitica; mycelium ex hyphis tenuibus flavidis vel flavo-viridulis copiose anastomosantibus 2-3 μ latis compositum; perithecia laxe gregaria applanato-globulosa, 4328

100-140 μ diam., ostiolo typico carentia, ad verticem verrucis vel papillulis minutis aut elongatis et tunc usque 20 μ longis circinatim dispositis irregularibus saepe obscurioribus praedita, brunneola, parenchymatice e cellulis 6-8 μ diam., contexta; asci cylindracei; breviter pedicellati, 42-50 × 10-12, subinde elongati usque 70 μ longi, octospori; paraphyses copiosae, ascos superantes, 1 μ crassae; sporae distichae, in ascis elongatis monostichae, oblongae, 1-septatae, non constrictae, 12-14 × 3, diu hyalinae, tandem flavoviridulae.

Hab. in mycelio Meliolae cujusdam ad folia Ixoraae Cumingii (Rubiaceae), prov. Bataan Luzon. Ins. Philipp. — Gen. *Chaetostigmella* Syd., l. c., p. 199 a *Phaeodimeriella* paraphysibus praesentibus tantum differt.

2. **Phaeodimeriella curviseta** Sydow, Ann. Mycol., 17., 1919, p. 35.— 4329
Perithecia sparsa, superficialia, mycelio fere nullo vel saltem aegre perspiciendo, globulosa, 80-130 μ diam., parenchymatice e cellulis fuscis 8-10 μ diam. composita, parte superiore circa ostiolum atypicum indistinctum setis pluribus rigidis plus minus introrsum curvatis continuis apicem versus attenuatis atro-brunneis 20-35 μ longis 3-5 μ latis obsita; asci tenuiter tunicati, fasciculati, plerumque cylindracei subinde inferne leniter ventricosi, sessiles, 38-45 × 8-10, aparaphysati 8-spori; sporae distichae, elongato-ellipsoideae vel saepius oblongae, utrinque obtusae, obscure olivaceo-brunneae, medio septatae et leniter constrictae, leves 10-14 × 3,5-4,5; pycnidia peritheciis similia, aeque setulosa, sed plerumque paullo minora; conidia oblonga, continua, subhyalina, utrinque minute 1-guttulata, 7-10 × 2-3.

Hab. parasitica in Diedickea singulari Syd. ad folia Polyosmae cyaneae Ehn. (Saxifragaceae), Cabadbaran, M. Urdaneta, prov. Agusan, ins. Mindanao, Philippin. (A. D. E. Elmer).

3. **Phaeodimeriella capensis** Doidge, Trans. R. Soc. South Afr. V. 1917, 4330
p. 719 et 742, t. 58 fig. 8. — Hypophylla v. amphigena, maculas effusas radiantia, atras, 3-5 mm. diam., efficiens; hyphis radiantibus, 6-7 μ crassis hyphopodiis continuis, alternis vel sub-oppositis; ramis oppositis; peritheciis numerosis, atris globulosis, carbonaceis, verruculosis, 146-160 μ diam., setulosis; setis 15-20, attenuatis; ascis numerosis, paraphysatis, ellipticis, octosporis, apice incrassatis, sessilibus, 55-70 × 12-14; sporidiis sub-distichis, fuscis, 1-septatis, ellipsoideis, ad septum leniter constrictis, 16-18 × 4-5, pycnidiis peritheciis similibus; conidiis ellipsoidis, continuis, circ. 14 × 3.

Hab. in foliis Apodytis dimitiae, Knysna, C. B. S. (P. J. Pienaar).

WAGERIA F. L. Stevens et N. E. Dalbey, Mycologia, 11., 1919, p. 7 (a Cl. Dr. Harold Wager, anglico). — Mycelium brunneum superficiale hyphopodiatum, perithecium sphaeroideum astomum, typice perisporiaceum; asci octospori, sporidia brunnea bilocularia; perithecium appendicibus vermiformibus praeditum. — A gen. *Dimerium* appendicibus vermiformibus praesentibus a *Phaeodimeriella* et *Acanthostigma* setulis nullis diversum.

1. **Wageria portoricensis** F. L. Stevens et N. E. Dalbey, l. c., fig. 11-12.— 4331
Mycelio pallide brunneo superficiale irregulariter ramoso 4 μ cr.; hyphopodiis irregulariter dispositis numerosis, primum subsphaeroideis dein irregularibus 7-10 μ diam.; peritheciis sphaeroideis, parvis 47-55 μ diam., ascis paucis sensim maturantibus; appendicibus vermiformibus 1-3, plerumque 1, contortis, 40-80 × 7; ascis inordinatis magnitudine variabilibus, 8-sporis; sporidiis bilocularibus, obtusis, brunneis, 21 × 6-7.

Hab. in Gonzalagunia spicata, Jajome Alto, el Alto de la Banderas, Porto Rio, Amer. bor.

Genera ulterius inquirenda:

PHAEOCRYPTOPUS Naoumoff, Champ. Oural I, in Trav. Bur. mycol. (1915) p. 20 (Etym. *phaios* obscurus et *Cryptopus* cui affinis). — Mycelium superficialiter effusum, laxum, brunneum, tenue — Perithecia globosa, v. globoso-depressa, irregulariter ostiolata, basi stipitiformi in matricem immersa praedita; contextu parenchymatico, e tenaci submolli. Asci cylindracei paraphysati, octospori. Sporidia 1-septata, fuliginea. — A *Dimerio* videtur differre, imprimis peritheciis basi stipitiformi immersa praeditis, et a *Cryptopode* sporidiis coloratis.

1. **Phaeocryptopus Abietis** Naoumoff, l. c., p. 20 t. I f. 1, a. b. (sed ubi 4332
in tabula?). — Mycelii hyphis 3 μ cr. brunneis; peritheciis e globoso applanatis 85 μ diam., v. 110 μ lat. et 95-100 μ alt., secum nervum longitrorsum dense seriatis; contextu 14-22 μ cr. e cellulis angulosis, brunneis 10-13 μ diam. efformato; ascis cylindraceis 55-60 × 9,6-12, pedicellatis, irregulariter mono-v. subdistichis, paraphysatis; paraphysibus filiformibus, simplicibus, hyalinis 70 × 2,7; sporidiis 14-16 × 5,5, prope medium septatis, constrictis, fuligineis, primo oblique dein recte distichis, loculis vix aequalibus.

Hab. in foliis adhuc vivis v. languidis Abietis sibiricae, Perm, Ural, Rossia.

DIMERIOPSIS F. L. Stevens, Trans. Illin. Ac. of Sc. v. X, 1917, p. 171 (Etym. a *Dimerium* cui affinis). — Perithecia infra crusta myceliali efformata.

1. **Dimeriopsis arthrostylidicola** F. L. Stevens, l. c., fig. 2. — Mycelium superficiale nigrum, caules hinc inde incrustante. Mycelio ex hyphis 4-5 μ cr. sinuosis, brunneis dense intertextis margine radiantibus efformato; hyphopodiis nullis; setis crasse tunicatis, numerosis, 312 × 10; peritheciis 400-450 μ diam. astomis sub mycelio nidulantibus; ascis numerosis clavatis, crasse tunicatis, tunica apice tenuiori, octosporis 100-150 × 25-30; paraphysibus filiformibus collabescentibus; sporidiis e rectis leniter falcatis, inordinatis, biloculariibus, raro quadriloculariibus, obscure brunneis, ad septa constrictis obtusis, 40-55 × 12-14. 4333

Hab. in caulibus Arthrostylidii sarmentosi, Monte Alegrillo, Porto Rico.

Sect. 5. Phaeophragmiæ

HARAEA Sacc. et Syd., Ann. Mycol. XI, 1913, p. 312 (Etym. a cl. K. Hara fungi detectore).— Perithecia superficialia, globulosa, sessilia, membranaceo-subcarbonacea, astoma, epapillata, nigra, setulis parcis, praelongis, rectiusculis, septatis, nigricantibus conspersa; contextu grosse celluloso. Asci tereti-oblongi, octospori, paraphysibus inaequalibus mucosis obvallati. Sporidia oblongo-fusoidea, 3-septata, grosse 4-guttata, dein fuliginea. — Videtur quasi *Chaetomidium* phaeophragmium.

1. **Haraea japonica** Sacc. et Syd., l. c., p. 312. — Peritheciis gregariis globosis, atro-nitidulis, 140 μ diam., setulis 900-1000 × 9-10, filiformibus, basi subincrassatis, septatis, fuligineis, summo apice non acutis; contextus cellulis globoso-polyhedricis, fuligineis; ascis tereti-oblongis, apice rotundatis, 100-120 × 30, mucoso-paraphysatis, octosporis, breviter crasseque stipitatis; sporidiis distichis, oblongo-fusoideis, 3-septatis, diu hyalinis, grosse 4-guttatis, 35-40 × 11-12, demum fuligineis, ad septum medium non v. vix constrictis. 4334

Hab. in culmis tenuioribus Sasae paniculatae (Graminaceae, Kawauye-mura in Japonia (K. Hara). — Mycelium repens, breve, subinde fasciculatum, nullo modo melioloideum.

PERISPORIOPSIS F. L. Stevens, Trans. Illin. Ac. of Sc. v. X, 1917, p. 170 (Etym. a *Perisporium* cui affinis). — Sporidia primum violacea demum brunnescentia, saepe muriformia; asci primum in parenchymate sparsi demum in cavitate peritheciorum aggregati. Si gen. hoc validum habendum est, nomen novum **Stevensea** Trotter proponendum, quia jam extat gen. *Perisporiopsis* P. Henn. 1904 (Pseudosphaerieae).

1. **Perisporiopsis Wrightii** (B. et C.) F. L. Stevens, l. c. 4335

Huc ducendum est *Perisporium Wrightii* B. et C., Syll. I p. 57.— Cnfr. de hac specie A. Wolf, Ann. Mycol. X, 1912, p. 113, cum icon et tab., quae morbum « black spot » dictum gignit.

PERISPORIUM Fr. — Syll. I p. 55, IX p. 412, XI p. 260, XVII p. 544, XXII p. 44. — Sec. Theissen et Sydow, Ann. Myc. 15., 1917, p. 448, gen. hoc minime servandum quia species typicae initio conditae, v. steriles v. ad greges diversos Fungorum pertinent.

1. **Perisporium Bromeliae** F. L. Stevens, Trans. Illin. Ac. of Sc. v. X, 1917, p. 168. — Maculis hypophyllis fumosis, 1-2 cm. diam.; mycelio superficiali, copioso, brunneo-nigro, ex hyphis septatis sparse ramosis efformato; peritheciis irregularibus, globosis, 110-120 μ, astomis; ascis ovatis e basi perithecii fasciculatis, numerosis, tetrasporis, aparaphysatis, 50-58 × 20; sporidiis fusoideis, stramineis, irregularibus continuis v. 1-3 septatis, ad septa non constrictis 30 × 8-10. 4336

Hab. in foliis Bromeliae pinguis (Bromeliaceae), in Porto Rico pluribus locis.

2. **Perisporium Meliolae** F. L. Stevens, Botan. Gazette, 65., 1918, p. 228, fig. 2. — Mycelio parco, inconspicuo, in mycelio Meliolae parasitico. Peritheciis in coloniis Meliolae centro aggregatis, lenticularibus, magis altis quam latis, 230-280 μ latis, 312 μ altis, superficie breviter denseque tuberculata; ascis numerosis, fasciculatis, 8-sporis, cylindraceis; paraphysibus nullis; sporidiis 31-44 × 7-14, brunneis, plerumque 3-septatis, apicibus inaequalibus uno conoideo altero plus minus rotundato, ad septa praecipue medio constrictis, tunica 2-3 μ cr. extus parum gelatinosa. 4337

Hab. in Meliola Compositarum. var. portoricensis Stev. in Eupatorio portoricense (Compositae), Dos Bocas prope Utuado et San Sebastian, Porto Rico. — Habitus peritheciorum sporidiorumque cum *Meliola* valde affinis.

3. **Perisporium portoricense** F. L. Stevens, Trans., Illin. Ac. of Sc. v. 4338

X, 1917, p. 169, fig. 1. — Obscure brunneum, orbiculare sparsum amphigenum, 0,5-1 mm. diam., coalescens ; mycelio copioso diffuso obscuro levi, ex hyphis ramosis 7-9 μ cr. et angulum rect. inter se efformantibus ; hyphopodiis nullis ; peritheciis numerosis globulosis, nigris, gregariis, carbonaceis, appendicibus ostiolis paraphysibus destitutis, superficie rugosula praed., 175-270 μ diam. ; ascis cylindraceis octosporis oblongis, obtusis stipitatis, 92-125 × 37-50 ; sporis curvulis, apice obtusis, basi parum attenuatis, 3-septatis articulis secedentibus, 70-80 × 8-9.

Hab. in foliis Calophylli Calabae (Guttiferae), Mayaguez Mesa, Porto Rico.

4. **Perisporium truncatum** F. L. Stevens, Trans. Illin. Ac. of Sc., v. X, 1917, p. 167. — Hypophyllum plagulas fumosas 1-2 cm. diam. efformans ; mycelio copioso superficiali brunneo, uniformi, ex hyphis 7 μ cr. septatis ramosis et ramis saepe angulum rectum efformantibus ; hyphopodiis nullis ; setulis mycelialibus erectis simplicibus, rectis, septatis 310 × 3,5, basi 8 μ cr. ; peritheciis sphaeroideis astomis, rugosulis, 109-202 μ cr., carbonaceis, cellulis circ. 17 μ diam. ; ascis e ovoideis cylindraceis, 125 × 34, tenuiter tunicatis ; sporis biseptatis, cylindraceis, 68-92 × 10, juventute hyalinis, vetustate fumosis v. obscuris, uno apice rotundatis, altero truncato anulatis. 4339

Hab. in foliis Ingae laurinae (Leguminosae), Maricao Mayaguez, El Alto la Bandera, Coamo, Ing. verae, Maricao, Porto Rico, Amer. bor.

5. **Perisporium Paulliniae** F. L. Stevens, Botan. Gazette, 65., 1918, p. 228. fig. 1. — Mycelio inconspicuo ; peritheciis paucis in coloniis vetustis Meliolae nidulantibus ; ascis e basi peritheciorum fasciculatis, 100 × 25, clavatis octosporis ; sporidiis inordinatis, e clavato-fusoideis parum irregulariter cylindraceis, 5-septatis, 44 × 10, utrimque rotundato-obtusis, obscure fumosis, cellulis duobus mediis plerumque crassioribus. 4340

Hab. in Meliola Hessii Stev., in Paullinia pinnata (Sapindaceae), Mayagues, Porto Rico. — Habitus peritheciorum sporidiorumque cum *Meliola* valde affinis.

6. **Perisporium Lantanae** P. Henn., Hedw. vol. 48 (1908) p. 5. — Peritheciis hypophyllis, gregariis, in villo nidulantibus, globulosis, atris, cellulosis, 140-180 μ diam., hyphis fuscidulis repentibus, simplicibus vel ramosis, 3-7 μ crassis circumdatis ; ascis oblongo-ovoideis v. clavatis, apice rotundatis, octosporis, 60-80 × 18-20 ; sporidiis distichis vel conglobatis, fusoideis v. clavatis, curvulis, utrinque 4341

obtuse rotundatis, medio 1-septatis, constrictis, dein 3-septatis olivaceo-fumosis, 23-32 × 6-10.

Hab. in foliis Lantanae sp. (Verbenaceae), S. Paulo, Capital, Cheara, Brasilia.

PERISPORINA P. Henn. — Syll. XVII p. 545.

1. **Perisporina Lantanae** F. L. Stevens, Trans. Illin. Ac. of Sc. v. X, 1917, p. 170. — Hypophylla copiose feltrata. Mycelio e obscure stramineo nigrescenti, ex hyphis crebre septatis 4 µ circ. cr. hyphopodiis destitutis praedito; peritheciis maturis 110-130 µ diam., globosis astomis, junioribus areolatim radiantibus cinctis, dense setulosis, 70-480 × 7, septatis obscuris, parietibus perithecii dense reticulatis; ascis 61-68 × 17-20, octosporis, paraphysibus hyalinis filamentosis, ramosis obvallatis; sporidiis inordinatis 2-3 septatis, obscuris, 34-37 × 7, cellulis duobus majoribus. 4342

Hab. in foliis Lantanae camarae (Verbenaceae), Lares, Amer. bor.

*) **MELIOLA** Fr. — Syll. I p. 60, IX p. 413, XI p. 260, XIV p. 470, XVI p. 413, XVII p. 546, XXII p. 45.

1. **Meliola irregularis** Stevens, Mel. Porto Rico in Illin. Biologic. Monogr. II 1916, p. 483, fig. 6. — Coloniis amphigenis, irregularibus, 1-3 mm. diam., nigris; mycelio dense reticulato, irregulariter ramoso, 7 µ diam.; hyphis saepe densissimis et contextum formantibus; hyphopodiis capitatis alternis v. irregularibus, crebris, cellula capitata subpiriformi, 17 × 10, basilari 3-7 µ longa; hyphopodiis mucronatis alternis v. oppositis, ampulliformibus, angustis, 20 µ long.; setis mycelialibus et perithecialibus nullis; peritheciis 200 µ diam., verrucis conicis 17 µ altis asperis; ascis bisporis; sporidiis 4-septatis, constrictis, brunneis, obtusis, 41 × 14, saepe irregularibus, uno apice acutis, cellula una v. pluribus crassioribus, septisque subinde obliquis v. numero vario. 4343

Hab. in foliis Hygrophilae brasiliensis (Acanthaceae), Porto Rico. — Species peritheciis *M. glabrae* affinis.

2. **Meliola hamata** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 548. — Amphigena, plerumque epiphylla, plagulas pelliculosas orbiculares 4344

*) De affinitatibus cum Microthyriaceis cnfr. F. v. Höhnel, in Ber. d. deutsch. bot. Ges. Bd. 36., 1918, p. 471.

v. irregulares 3-10 mm. latas nigras tenues parce velutinas formans; mycelio bene radiante, ex hyphis longis dense intertextis obscure fuscis 7-9 μ cr. ramosis et anastomosantibus composito; hyphopodiis capitatis numerosis, alternantibus, 22-27 × 10-12, elongato-piriformibus, cellula superiore rotundata, inferiore minuta; hyphopodiis mucronatis rarioribus, 22-28 μ long.; setis mycelicis, numerosis, atris, tota longitudine opacis, semper ad apicem uncinatis, acutis, rarius obtusis, 350-450 × 9-12; peritheciis parcis, sparsis, globulosis, atris, verrucosis, astomis, 200-250 μ diam.; ascis non visis; sporidiis oblongo-cylindraceis, 4-septatis, constrictis, utrinque late rotundatis, obscure castaneo-brunneis, 45-50 × 17-19.

Hab. in foliis Buchananiae arborescentis (Anacardiaceae), Angat prov. Bulacan, et in prov. Rizal Ins. Philippin. (M. Ramos). — *Mel. Balansae* Gaill. proxima a qua differt sporidiis minoribus et hyphopodiis mucronatis.

3. **Meliola Comocladiae** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 493, fig. 22. — Coloniis amphigenis, superne copiosioribus, punctiformibus, 1-3 mm. diam.; mycelio reticulato ex hyphis 8 μ diam. plerumque opposite-ramosis; hyphopodiis capitatis alternis, non crebris, 17-20 μ inter se distantibus, cellula capitata piriformi, angulosa et saepe incurva, 20 × 14, basilari 3-5 μ; hyphopodiis mucronatis alternis vel oppositis, ampulliformibus; setis mycelialibus nullis, perithecialibus plus minusve copiosis, rectis, apice plerumque uncinato vel contorto, 115 × 8, ubique fuscis; peritheciis 100-150 μ diam., scabris, areola myceliali radiante cinctis; ascis mox evanidis, tetrasporis; sporidiis 4-septatis, pallide brunneis, lenissime constrictis, cylindraceis, obtusis, 41 × 17. 4345

Hab. in foliis Comocladiae glabrae (Anacardiaceae), nec non Spondias Mombin (Anacardiaceae), Porto Rico. — Affinis *M. tortuosae*, a qua tamen differt characteribus mycelii.

4. **Meliola opaca** Syd. in Leaflets of Philipp. Bot. VI (1913) p. 1924.— Amphigena, maculas atras velutinas 2-3 mm. latas formans; mycelio ex hyphis longiusculis dense intertextis ramosis fuscis 6-8 μ cr. composito; hyphopodiis capitatis numerosis, alternantibus, oblongo-ovatis, apice obtusis, rectis vel curvatis, bicellularibus, 17-24 × 8-10; hyphopodiis mucronatis raris, ampulliformibus; oppositis, 20-27 μ longis; setis mycelicis numerosissimis, rectis, erectis, rigidis usque ad apicem opacis, subatris, 300-420 × 9-11, apice 2-4-furcatis, dentibus usque ad 16 μ longis; peritheciis aggregatis, globosis, rugulosis, atris, 100-160 μ diam., omnimo inter setas abscon- 4346

ditis; ascis ovatis 2-3-sporis; sporidiis oblongis, utrinque late rotundatis, 4 septatis, ad septa constrictis, fuscis, 30-42 × 13-15.

Hab. in foliis Dracontomeli Dao (Anacardiaceae), Cabadbaran, Mindanao, ins. Philipp.

5. **Meliola geniculata** Syd. et Butl., Ann. Mycol. IX, 1911, p. 381.— 4347
Mycelio hypophyllo haud maculiformi, tenuissimo, atro, irregulariter effuso, saepe nervos primarios sequente, margine radiante, ex hyphis fuscis septatis 5-6 μ cr. composito; hyphopodiis capitatis alternantibus, 13-16 μ long., cellula basali minuta, superiore clavata; hyphopodiis acuminatis plerumque oppositis, deorsum leniter incrassatis, superne attenuatis et saepe curvatis, usque ad 18 μ long; setis mycelicis sparsis, saepe etiam perithecia circulo laxe circumdantibus, 200-275 μ long. 5-8 μ cr., prope basim abrupte geniculatis, ad apicem bis usque quinquies incisis quasi denticulatis (dentibus brevibus obtusisque), opacis; setis perithecialibus nullis; peritheciis sparsis, paucis, globosis, grosse tuberculatis, atris, 130-170 μ diam.; ascis ovatis, brevissime stipitatis bisporis; sporidiis oblongis v. oblongo-cylindricis, 4-septatis, ad septa constrictis, utrinque rotundatis, fuscis v. sordide brunneis, 35-37,5 × 12,5-15,5.

Hab. in foliis Odinae Wodieri (Anacardiaceae), Pulliyanur Travancore, Indiae or. — *Mel. Anacardii* A. Zimmer. proxima. (E. J. Butler).

6. **Meliola Uvariae** Rehm, Ascomyc. Philipp. II. in Philipp. Journ. of 4348
Sci. VIII (1913) p. 251. — Mycelio in epiphyllo haud mutato plagas orbiculares 0,5-2 cm. latas formante, in ambitu fuscidulas, in centro floccose nigras; hyphis mycelii primariis plurimis, rectis, septatis, vix ramosis, dilute fuscidulis, 3-4 μ latis, centrifuge repentibus, itemque hyphis mycelii propriis, arachnoideo-centrifuge extensis, subramosis, septatis, fuscis, circ. 8 μ latis, ambitum plagae tenerum fuscidulum reddentibus; hyphopodiis capitatis plurimis, plerumque monostichis, 2-cellularibus, clavatis, usque ad 20 μ altis, cellula superiore 15-20 μ lata; hyphopodiis uncinatis nullis conspicuis; peritheciis versus centrum plagae sparsis, globulosis, atris, glabris, poro haud pertusis, 250 μ ca. diam.; setis plurimis circa perithecium in mycelio coacervatis, erectis, interdum subcurvatis et verruculosis, septatis, fuscis, apice obtuso dilutioribus, usque ad 350 μ altis, 7-10 μ latis; ascis ovato-clavatis, octosporis, aparaphysatis, usque ad 100 × 25-30; sporidiis distichis, oblongis, rectis, utrinque rotundatis, 3-septatis, medio interdum subconstrictis, de-

mum fuscis, 40 × 10-12. — Adsunt conidia plurima ad hyphas mycelii adnata, interdum hyphopodio opposita, fusiformia, 4-septata, in stipitem hyalinum tenuem elongata, subfusca, usque ad 50 × 9-10.

Hab. in foliis U v a r i a e (Anonaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (C. F. BAKER). — Affinis *M. insigni* Grall. sed notis plurimis distincta.

7. **Meliola Tabernemontanae** Speg., Mycet. Argent. VI, Anal. Mus. 4349
Nac. Buenos Aires XXIII p. 45 (1912). — Caespitulis epiphyllis, vel laxe gregariis, repando-difformibus, 2-8 mm. latis, aterrimis, eximie velutinis, subiculo submembranaceo; hyphis densissime intertextis, 10 μ cr., rectis vel undulatis, saepius opposite ramosis; hyphopodiis antrorsis, adpressis, alternis vel oppositis, saepius obovatis, 20 × 10, levibus, non lobulatis; setulis confertiusculis, rectis, 200-300 × 6-8, opacis, apice obtusissimis, pellucidis, rotundatis vel truncatis; peritheciis globosis, 150-200 μ diam., glabris, atris, grosse verrucosis, non collabescentibus, contextu grosse parenchymatico; ascis ellipsoideis, 2-3-sporis, mox diffluentibus; sporidiis cylindraceis, obtusissimis, 4-septatis, leniter constrictis, subopace fuligineis, e latere leniter compressis, 35-42 × 15-16 × 12-14, loculis saepius grosse 2-guttulatis.

Hab. in foliis vivis T a b e r n e m o n t a n a e h i s t r i c i s in silvis prope Bompland, Misiones: Argentina. — Var. **Forsteroniae** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 518. — A typo differt setis usque ad 700 μ longis, apice acuto attenuatis, hyphopodiis capitatis latioribus et magis angulosis. — *Hab.* in foliis F o r s t e r o n i a e c o r y m b o s a e (Apocynaceae), Uaetuado, Porto Rico.

8. **Meliola Funtumiae** Beeli, Bull. Jard. Bot. Etat. Bruxelles, v. 7., 4350
1920, p. 95. — Amphigena sed plerumque epiphylla, maculas orbiculares atras confluentes 2-6 mm. diam. efformans; mycelio bene evoluto, hyphis rectis, ramis oppositis, brunneis 12-40 × 7-8; hyphopodiis numerosis capitatis, alternis 12-14 × 10, cellula superiori subglobosa v. ovata, basilari brevi 4-6 × 8; hyphopodiis mucronatis paucis, plerumque solitariis elongato-acuminatis; setis mycelicis numerosis, sub peritheciis locatis, atris, septatis, simplicibus, rectis, ad apicem attenuatis 400-500 × 10-12; peritheciis verrucosis, brunneis 100-140 μ diam.; ascis non visis; sporidiis 4-septatis ad septa constrictulis, utrimque obtusis, brunneis, cellulis terminalibus obtusis majoribus, 45-50 × 19-20.

Hab. in foliis F u n t u m i a e sp. (Apocynaceae), Kwango Congo

Africae trop. (VANDERYST). — *M. laevigatae* Syd. proxima sed differt sporarum et setarum mycelii statura.

9. **Meliola laevigata** Syd. in Leaflets of Philipp. Bot. V (1912) p. 1537.— 4351
Mycelio hypophyllo, plagulas discoidales 3-10 mm. latas atras efformante, ex hyphis longiusculis, remotiuscule ramosis, fuscis, 5-7 μ crassis composito; hyphopodiis mucronatis oppositis, sat numerosis, 15-20 μ longis; hyphopodiis capitatis clavatis, rectis vel leniter curvulis, saepe leniter lobatis aut angustatis, 2-cellularibus, 20-25 × 8-13; setis mycelicis rectis, erectis, simplicibus, opacis, apice acutis, 350-700 × 7-10; peritheciis in mycelio sparsis, globosis, in sicco collapsis, atris, levibus, haud rugosis, 130-156 μ diam.; ascis ovatis, 40-60 × 25-45, bisporis; sporidiis oblongis, utrinque late rotundatis, 4-septatis ad septa constrictis, obscure brunneis, 40-44 × 16-20.

Hab. in foliis Paralstoniae clusiaceae (Apocynaceae), Puerto Princesa, Palawan, ins. Philipp.

10. **Meliola Strophanthi** Doidge, Trans. R. Soc. South. Afr. V, 1917, 4352
p. 729 et 745, t. 62 fig. 23.— Amphigena, plerumque, hyphophylla, subcrustacea; maculas minutas, atras, orbiculares, 1-2 mm. diam., efficiens: mycelio peritheciigero ex hyphis flexuosis, 6-9 μ crassis, e cellulis ca. 18 μ longis compositis, brunneis, ramis oppositis; hyphopodiis capitatis alternis, breviter stipitatis, 20-25 μ long., cellula superiore cylindrica, recta v. leniter curvata, convexa, 16-18 × 7-9; hyphopodiis mucronatis paucis, ampullaceis, ca. 18 μ long.; setis mycelicis nullis, peritheciis paucis, congregatis, atris, globosis 215-250 μ diam., verrucosis; ascis maturis non visis; sporidiis 4-septatis, cylindricis, ad septa vix constrictis, utrinque rotundatis, 40-45 × 15-18, mycelio conidiifero inter mycelio peritheciigero intertextis, pallidiore tenuiore; conidiophoris numerosis, erectis septatis, brunneis, 180-200 μ long.; conidiis fusiformibus 3-septatis, 18-32 × 5-9.

Hab. in foliis Strophanthi speciosi (Apocynaceae), Woodbush, Zoutpansberg Dist. (E. M. DOIDGE).

11. **Meliola Trachelospermi** H. S. Yates, The Philipp. Journ. of Sc., 4353
Bot. 13., 1918, p. 370 (corr. *trachelospermae*). — Maculas hypophyllas, atras, subpelliculosas, orbiculares 2-5 mm. diam., vel confluentes efformans mycelio abundante ex hyphis brunneis 7-9 μ crassis formato, ramis oppositis; hyphopodiis capitatis numerosissimis, alternantibus, cellula superiore ovata, 13-16 × 10, cellula inferiore 5-10 μ longa; hyphopodiis mucronatis numerosis, plerumque alternantibus, usque ad 18 μ longis; setis mycelicis paucis, rectis,

erectis, acutis, atris, opacis, 300-400 μ longis, ad basim 8 μ cr.; peritheciis globosis, atris, opacis 180-200 μ diam.; sporidiis 4-septatis, elongatis, utrinque late rotundatis, ad septa constrictis, brunneis, 35-40 × 16-20.

Hab. in foliis Trachelospermi (Apocynaceae), Mount Lumutan, Prov. Rizal Luzon Ins., Philipp. (Ramos et Edaño).

12. **Meliola depressula** Syd., Ann. Mycol. 15., 1917, p. 186. — Amphigena, 4354
plagulas orbiculares 2-3 mm. diam., atras convexas in aversa folii pagina maculam depressam efficientes velutinas formans; mycelium parce evolutum, ex hyphis brevibus dense ramosis copiose septatis obscure brunneis 6-8 μ latis compositum; hyphopodia capitata alternantia, 12-15 μ longa, cellula superiore 9-11 μ lata late rotundata semper integra subglobosa vel ovata, cellula inferiore brevissima saepe vix conspicua, hyphopodia mucronata rara; setae myceliales circa perithecia densissime stipatae, copiosissimae, 170-230 μ longae, 6-8 μ latae, ad apicem plerumque uncinatae, tota longitudine opacae; perithecia globosa, 150-230 μ diam., glabra, levia; asci facile diffluentes; sporae cylindraceae, 4-septatae, non vel vix constrictae, utrinque obtusae, flavo-brunneae vel dilute brunneae, 28-30 × 10-12.

Hab. in foliis Urceolae imberbis (Apocynaceae), in collibus pr. Paete, Laguna, Ins. Philipp. (C. F. Baker).

13. **Meliola amphitricha** Fr. — Syll. I p. 63, Add. II, IV. — var. **pun-** 4355
gens Patouillard, Bull. Soc. Mycol. de Fr., XXXIV, 1918, p. 89. — A typo recedit hyphis setuliformibus curvato-flexuosis nec rigidis, apice distincte acutis nec obtusis.

Hab. in foliis Vincae et Pittospori (Apocynaceae), in Ins. Madagascar (Viguier).

14. **Meliola Wrightiae** H. S. Yates, The Philipp. Journ. of Sc., Bot. 13., 4356
1918, p. 371. — Amphigena, plerumque epiphylla et totam folii superficiem (plus minus continua aterrima) obducens; maculae orbiculares 3-6 mm. diam.; mycelio ex hyphis densissime intertextis brunneis septatis anastomosantibus composito; ramis alternantibus vel oppositis; hyphopodiis capitatis numerosis, plerumque alternantibus, subglobosis vel ovatis, 12 μ longis 10-12 μ latis, cellula inferiore ca. 6 μ longa, hyphopodiis mucronatis paucis, irregularibus vel oppositis, ampulliformibus, usque ad 18 μ longis; setis mycelicis numerosis, erectis, rectis vel leviter curvatis, 200-225 μ longis 6-8 μ latis, saepe ad basim geniculatis, obtusis, obscure brunneis vel versus apicem dilutioribus et fuscis; peritheciis nu-

merosis, globosis 120-150 μ diam., atris, opacis, tuberculatis, in sicco collapsis; ascis ovatis, 30 × 20 bisporis, mox evanescentibus; sporidiis cylindraceis, utrinque late rotundatis, fuscis, 4-septatis, ad septa leviter constrictis, 27-35 × 12-16.

Hab. in foliis Wrightiae laniti (Apocynaceae), Prov. Rizal (Ramos), Faal Volcano in Prov. Batangas (Merrill), Luzon Ins. Philipp.

15. **Meliola maricaensis** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 499. — Coloniis hypophyllis, irregularibus, sparsis, 5-15 mm. diam., confluentibus, hyphis atris, 7 μ crassis, irregulariter ramosis, laxe reticulatis; hyphopodiis capitatis alternis vel irregularibus, 30-70 μ inter se distantibus, cellula capitata ovoidea vel piriformi vel etiam obpiriformi, angulosa, irregulari, 17 × 10, basilari 5-7 μ longa; hyphopodiis mucronatis alternis vel oppositis, phialiformibus, 16-18 × 7; setis mycelialibus nullis, perithecialibus paucis, 3-10, rectis vel apice parum curvulis, 100-150 × 7, fuscis, apice obtusis; peritheciis 170 μ diam., scabris; ascis mox evanidis; sporidiis 4-septatis, brunneis, leniter constrictis, utrinque obtusis, 48 × 20. 4357

Hab. in foliis Ilicis nitidae (Aquifoliaceae), Maricao, Porto Rico. — *M. Cupaniae* affinis, a qua differt structura hyphopodiorum.

16. **Meliola Boerlagiodendriae** H. S. Yates, The Philipp. Journ. of Sc., Bot. 13., 1918, p. 365. — Maculas amphigenas, atras, primo orbiculares, 5-10 mm. diam., deinde confluentes et magnam partem folium occupantes efformans, mycelio abundante, ex hyphis obscure brunneis et subopacis 7-8 μ diam. composito; hyphopodiis capitatis numerosis, alternantibus unilateralibus vel irregularibus, cellula superiore subglobosa, 12-14 μ diam., cellula inferiore 4-5 μ longa; hyphopodiis mucronatis paucis, usque ad 16 μ longis; setis numerosissimis, erectis, dichotome furcatis, opacis, atris, ad basim 8 μ latis; peritheciis paucis, globosis, atris, opacis, tuberculatis, 150-200 μ diam.; ascis non visis; sporidiis 4-septatis, ad septa constrictis, subcylindraceis, utrinque rotundatis, obscure brunneis, 30-50 × 12-15. 4358

Hab. ad folia Boerlagiodendri (Araliaceae), Mount Binuang Prov. Tayabos Luzon, Ins. Philipp. (Ramos et Edaño).

17. **Meliola Dieffenbachiae** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 530, fig. 56. — Coloniis amphigenis sed in epiphyllo typice paullo copiosioribus, in hypophyllo contra latioribus, 1-5 mm. diam., atris, velutinis; mycelio dense intricato-contexto, ramis sae- 4359

pius oppositis; hyphopodiis capitatis alternis vel oppositis, oblongis, sphaerioideis vel curvis, cellula basilari 4 μ, capitata, 10-14 μ longa; hyphopodiis mucronatis paucis alternis vel oppositis; setis mycelialibus rigidis, atris, rectis, 400 μ circ. longis, apice breviter ramosis vel tantum denticulatis, dentibus forma et magnitudine variis; setis vel appendicibus perithecialibus nullis; peritheciis in centro coloniae gregariis, copiosis, 140-170 μ diam.; ascis mox evanidis, 2-4-sporis; sporidiis cylindraceis, 40 × 14, utrinque obtusis, 4-septatis, ad septa leniter constrictis, cellulis terminalibus paullo latioribus.

Hab. in foliis Dieffenbachiae sequines (Araceae), Porto Rico. — Affinis *M. fuscidulae* sed characteribus setarum facile dignoscenda.

18. **Meliola Philodendri** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 528, fig. 54. — Coloniis praecipue epiphyllis, circularibus, atris, 1-5 mm. diam., velutinis; mycelio rudi, 8 μ cr., recto, ramis oppositis, prope coloniae marginem setoso; hyphopodiis capitatis plerumque oppositis, 20-30 μ inter se distantibus, cellula basilari brevi, 3 μ, cellula capitata ovoidali, non angulata, 14 × 10; hyphopodiis mucronatis parcis, ampulliformibus, alternis vel oppositis, saepe curvis; setis mycelialibus 230-300 μ longis, basi 9 μ cr. atris, apice 3-pluries dichotomice furcatis, ramis circ. 120 μ longis, ultimis acutis; peritheciis 185 μ circ. diam.; sporidiis cylindraceis, obtusis, 4-septatis, leniter constrictis 48-54 × 15-20, interdum vero tenuioribus et magis constrictis, submoniliformibus. 4360

Hab. in foliis Philodendri Krebsii (Araceae), Porto Rico. — Species notis variis bene distincta.

19. **Meliola leptidea** P. et H. Syd., Ann. Mycol. X, 1912, p. 38. — Mycelio epiphyllo, plagulas orbiculares 2-4 mm. diam. velutinas subinde confluentes efformante, ex hyphis 8-11 μ cr. obscure castaneo-brunneis laxe ramosis composito; hyphopodiis capitatis numerosissimis, dense confertis, alternantibus v. saepe oppositis, 18-28 μ long., cellula superiore ovata v. globulosa 10-15 μ cr. obtusa; hyphopodiis mucronatis rarioribus usque 25 μ long.; peritheciis laxe gregariis, globosis, atris, in sicco leniter collapsis, asperulis, 250-300 μ diam.; setis mycelicis numerosissimis, 200-300 μ long. 8-11 μ crassis, rectis, erectis, rigidis, opacis, superne in ramos duos longos (usque 130 μ long.) patenter leniter incurvatis divisis, ramis iterum in ramulos duos variae longitudinis 30-80 μ long. ad apicem bifurcatos divisis; ascis ovatis, 50-60 × 28-40, 2-3-sporis; sporidiis 4361

oblongis, utrinque late rotundatis, 4-septatis, ad septa constrictis, fuscis, 45-55 × 15-20.

Hab. in foliis Cussoniae sp. (Araliaceae), Woodbush, Zoutpansberg Distr., Transvaal (C. E. LEGAT). — Ab affinibus speciebus differt ramificatione setularum diversa.

20. **Meliola Hoyae** Sacc., Notae Myc. XXIII p. 60 (Accad. Ven. Trent. 1917). — Plagulis imprimis epiphyllis, e subcirculari irregularibus, 3-5 mm. latis (saepe in Gloeosporio parasiticis), opace nigricantibus; hyphis radiantibus, ramosis, 7-8 μ cr.; hyphopodiis capitatis, 18-19 × 11-12, uniseptatis, fulvo-fuligineis, copiose praeditis; hyphopodiis mucronatis non observatis; peritheciis globulosis, obsolete ostiolatis, 80-90 μ diam.; setis interspersis rarissimis, 300 × 11-12, aterrimis; sporidiis oblongis, utrinque rotundatis constricto-4 septatis, 42-44 × 14-15, fuligineis. 4362

Hab. in foliis emortuis Hoyae luzonensis (Asclepiadaceae), socio *Gloeosporio Hoyae*, Los Baños, Ins. Philipp. — Affinis *Mel. Montagnei* et *M. Uleanae*.

21. **Meliola Telosmae** Rehm, Ascomyc. Philipp. III, in Philipp. Journ. of Sci. VIII (1913) p. 392. — Mycelio plerumque epiphyllo, plagas velutinas, atras, orbiculares, 0,5-2 mm. latas, demum plus minusve late confluentes formante; hyphis rectis, sparse acutanguliter ramosis, fuscis, 5-7 μ cr., hyphopodiis capitatis plurimis, elongato-ovoideis, 2-cellularibus, alternantibus vel oppositis, usque ad 18 × 5-6, hyphopodiis mucronatis plerumque oppositis usque ad 20 × 6-8 obsessis; setis mycelialibus erectis, ad basim subcurvatis, apice acutatis, fusco-nigris, crebris, usque ad 250 μ longis, 5-7 μ cr.; peritheciis in medio mycelii paucis aggregatis, globulosis, haud rugosis, astomis, atris, ad 150 μ latis; ascis ovatis, 2-4-sporis 40-45 × 25; sporidiis oblongis, utrinque rotundatis, 4-septatis, haud constrictis, olivaceo-fuscis, 25-30 × 10-12. 4363

Hab. ad folia Telosmae procumbentis (Asclepiadaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (BAKER). — *M. microsporae* Pat. et Gaill. affinis; differt setis acutatis et usque ad apicem fusco-brunneis.

22. **Meliola perpusilla** Syd., Enum. Philipp. Fungi II, in Philipp. Journ. of Sci. VIII (1913) p. 480. — Epiphylla, rarius caulicola, maculas minutissimas 0,4-1 mm. latas atras efformans; mycelio radiante ex hyphis longis, remote ramosis, brunneis, 8-10 μ latis composito; hyphopodiis capitatis tereti-cylindraceis, rectis, erectis, brunneis, 16-24 × 8,5-10, cellula basali minuta; hyphopodiis mucro- 4364

natis non visis; setis mycelicis simplicibus, rectis vel leniter flexuosis, apice acutis, inferne subopacis, sursum plerumque pellucidis, 200-320 × 8-10; peritheciis 1-4 in quaque macula, globosis, atris, in sicco profunde umbilicatis, 100-150 μ diam., contextu parenchymatico e cellulis 8-10 μ diam. composito; ascis ovatis, 2-4-sporis, 30-42 × 20-30; sporidiis oblongis, utrinque late rotundatis, 4-septatis, ad septa leniter constrictis, fuscis, 24-28 × 11-13.

Hab. in foliis caulibusque vivis Tylophoraе, Luzon, Prov. Nueva Vizcaya, ins. Philipp. — Maculis minutissimis, hyphopodiis tereti-cylindricis et sporidiis angustis praecipue distincta. — Var. **congoensis** Beeli, Bull. Jard. Bot. Etat Bruxelles, v. 7., 1920, p. 97.— A typo recedit peritheciis (150-180 μ) et sporidiis (35-38 × 13-16) majoribus, setis mycelicis rarioribus sparsis pellucidis simplicibus rectis septatis ad apicem acutis, hyphopodiis capitatis alternis v. unilateralibus, cellula superiori ovata 15-17 × 10.

Hab. in foliis Asclepiadacearum, Kikwit Congo, Africae trop. (VANDERYST).

23. **Meliola dentifera** Syd., Ann. Mycol. 14., 1916, p. 78, fig. 3. — Hypo- 4365
phylla, plagulas minutas orbiculares aterrimas subvelutinas haud confluentes, 1-2 mm. diam., formans; mycelio ex hyphis fuscis 6-9 μ crassis dense ramosis composito, rete densissimum formante; hyphopodiis capitatis numerosis, integris, ovatis vel subglobosis, 12-16 μ longis, cellula superiore 10-14 μ lata globulosa vel late ovata, inferiore brevi; hyphopodiis mucronatis oppositis, usque 20 μ longis; setis mycelicis numerosissimis, rectis vel subrectis, 150-220 × 9-11, atris, opacis, raro superne subpellucidis, ad apicem sive dentibus numerosis sed brevissimis 1-2,5 μ tantum longis coronatis, sive bifidis in ramos breves crassos divisis et ramis his ad apicem dentibus pluribus instructis; peritheciis dense gregariis, globosis, astomis, non tuberculatis, 100-150 μ diam.; ascis ovatis 2-4-sporis; sporidiis breviter cylindraceis, 4-septatis, non vel parum constrictis, sordide brunneis, 22-28 × 11-12.

Hab. in foliis Arrabidaceae nicotianiflorae (Bignoniaceae), Seringal, San Francisco Rio Acre, Brasiliae (E. ULE).

24. **Meliola lanceolato-setosa** H. et P. Sydow, Ann. Mycol. XII, 1914, 4366
p. 197. — Epiphylla, plagulas orbiculares 1-4 mm. latas sparsas atras velutinas crassas efficiens; mycelio ex hyphis fuscis septatis 9-11 μ crassis densissime intertextis composito; hyphopodiis capitatis numerosissimis, alternantibus v. dense aggregatis, 22-28 μ long., cellula superiore globulosa usque ovata 10-14 μ lata; hypho-

podiis mucronatis non visis; setis mycelicis copiosissimis, rectis v. subrectis, tota longitudine opacis, atris, 250-350 μ long. 9-12 μ latis, sursum abrupte acuminatis; peritheciis numerosissimis in quoque plagula, globosis, atris, in sicco collapsis, astomis, modice tuberculatis, 150-220 μ diam.; ascis ovatis, 2-sporis; sporidiis oblongo-cylindraceis, utrinque rotundatis, 4-septatis, non v. parum constrictis; sordide brunneis, 42-46 × 12-16, cellulis subaequalibus.

Hab. in foliis vivis Markhamiae sp. (Bignoniaceae), prope Tengeni, Africa orient. (GROTE). — *Mel. francavilleanae* Gaill. proxima, sed hyphopodiis et sporis diversa.

25. **Meliola glabroides** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 486, fig. 13. — Coloniis amphigenis, plerumque vero epiphyllis, irregulariter circularibus, 1-8 mm. diam.; mycelio atro laxe reticulato, 7 μ diam., ramis utplurimum oppositis, saepe rectangulariter divaricatis; hyphopodiis capitatis alternis, non crebris, uno pro cellula, cellulis 30 μ circ. longis, cellula capitata ovoidea, interdum angulosa, 17 × 14, basilari 7 μ longa; hyphopodiis mucronatis paucis, alternis vel oppositis, ampulliformibus, 16-18 × 6; setis nullis; peritheciis 100-140 μ diam., papillis rotundatis asperatis; ascis mox evanidis; sporidiis 4-septatis, brunneis, lenissime constrictis, obtusis, 41-17. 4367

Hab. in foliis Piperis, Nectandrae, Simarubae, Sauvagesiae, Solani, etc., Porto Rico. — Var. **Schlegeliae** Stev., l. c. p. 488. — Differt hyphopodiis capitatis magis angularibus et contextu coloniarum paullo densiore. — *Hab.* in foliis Schlegeliae sp. (Bignoniaceae), El Alto de la Bandera, Porto Rico.

26. **Meliola Tecomae** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 521, fig. 48. — Coloniis amphigenis, plerumque epiphyllis, circularibus, 2-5 mm. diam.; mycelio atro dense contexto, hyphis 7 μ cr. ramis plerumque oppositis; hyphopodiis capitatis alternis, haud crebris, uno pro cellula, cellulis 35 μ circ. longis, cellula capitata ovoidea, 17 × 13, basilari 6-10 μ longa; hyphopodiis mucronatis oppositis, irregulariter conicis, 15-18 × 6, collo non perfecte distincto; setis perithecialibus nullis, mycelialibus copiosis, apice late uncinato-incurvis, 170 × 10, ubique fuscis, apice obtusis; peritheciis 70 μ diam., leviter scabris; ascis mox diffluentibus; sporidiis 4-septatis, brunneis, lenissime constrictis, obtusis, 44 × 17. 4368

Hab. in foliis Tecomae spp. (Bignoniaceae), Porto Rico.

27. **Meliola peruviana** Syd., Ann. Mycol. 14., 1916, p. 75. — Hypophylla, 4369

plagulas griseolas vel olivaceas laxas parum perspicuas 1-3 mm. latas formans; mycelio parcissimo, ex hyphis tenuiter tunicatis remote septatis 2-3 μ latis, pallide olivaceis haud hyphopodiatis composito; setis paucis, erectis, rigidis, septatis, 80-150 μ altis, 5-7,5 μ latis; peritheciis numerosis, dense stipatis, breviter pedicellatis, ovato-oblongis vel difformibus, plerumque utrinque attenuatis, 50-70 μ altis, medio 28-35 μ latis, apice obtusis, vix ostiolatis, contextu tenaci membranaceo ex cellulis polygonalibus 8-10 μ diam. pellucidis composito, monascigeris; ascis primitus globosis, dein ovatis vel oblongis, 42-55 × 18-28, octosporis aparaphysatis; sporidiis distichis, bicellularibus, non vel vix constrictis, utrinque rotundatis, pallide flavo-brunneolis, 16-20 × 7-8.

Hab. in foliis Bignoniaceae, Seringal, Auristella, Rio Acre Peruviae (E. Ule).

28. **Meliola Canarii** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 550. — 4370
Epiphylla, plagulas parum perspicuas indeterminatas 2-10 mm. latas saepe confluentes efformans; mycelio eximie radiante, matrici arcte adpresso, ex hyphis rectis centrifugis fuscis septatis, 7-10 μ latis, ramosis composito; hyphopodiis alternantibus, numerosis, cylindraceo-clavatis, 22-32 × 10-14, cellula basali plerumque brevi, superiore ellipsoidea v. ovato-rotundata, castaneo-brunneis; hyphopodiis mucronatis rarioribus, oppositis, fuscis, usque 22 μ long.; setis mycelicis sat numerosis, opace fuscis, leniter falcato-curvatis, leniter flexuosis v. subrectis, 300-550 μ long., ad basim 8-10 μ latis, sursum sensim attenuatis, ad apicem acutis v. obtuse attenuatis; peritheciis solitariis v. paucis in quaque plagula, globulosis, 130-175 μ diam., haud verruculosis; ascis?; sporidiis oblongis, rectis, utrinque late rotundatis, castaneo-brunneis, 4-septatis, constrictis, 40-45 × 14-20.

Hab. in foliis Canarii villosi (Burseraceae), prov. Nueva Vizcaya Luzon (R. C. Mc Gregor) et Mt. Marivelos prov. Bataan Luzon, Ins. Philippin. (P. W. Graff). — Vix differt species sequens.

29. **Meliola nigro-rufescens** Sacc., Notae Myc. XXIII p. 60 (Accad. 4371
Ven. Trent. 1917). — Plagulis amphigenis sed epiphyllis copiosioribus, nigricantibus, 6-8 mm. diam., interdum confluentibus, subcircularibus; hyphis radiantibus hyphopodiis capitatis et mucronatis typicis praeditis; setis copiosis, acutis, saepius incurvatis, opacissimis, 400-500 × 6; peritheciis globulosis, 160-200 μ diam., nigricantibus sed contextu grosse celluloso, rufo-fusco, extus colliculoso praeditis; cellulis contextus 10-12 μ diam.; ascis ellipsoi-

deis, 45-50 × 28-30, bisporis; sporidiis constricto-4-septatis, 35-43 × 15-17, fuligineis.

Hab. in foliis Canarii sp. (Burseraceae), Los Baños, Ins. Philipp.

30. **Meliola Bosciae** Doidge, Trans. R. Soc. South. Afr. V, 1917, p. 731 et 745, t 61, p. 26. — Epiphylla, rarius hypophylla, pelliculas tenues, suborbiculares, nigras, 2-3 mm. latas formans, hyphis radiantibus, circa perithecia crebre anastomosantibus, fuscis septatis plerumque curvatis, vermiculatis, 5,5-9 μ crassis; ramis oppositis, v. unilateralibus; hyphopodiis capitatis alternis v. unilateralibus, rarius oppositis, breviter stipitatis, 14-20 μ long., cellula superiore 10,5-16 μ long., scabra convexa, truncata et sub-lobata; hyphopodiis mucronatis plerumque prope perithecia, in ramis separatis v. inter hyphopodia-capitata sparsis, oppositis v. unilateralibus, ampullaceis, apice interdum uncinatis, 14-18 μ long., basi ca. 7 μ crassis; setis mycelicis nullis; peritheciis globosis, atris, verrucosis 160-180 μ diam., appendiculis 6-12 sparsis, simplicibus, 70-90 μ long., basi subbulbosis, ca. 6 μ crassis, ad apicem obtusum pellucidum attenuatis, rectis v. infra apicem abrupte curvatis; ascis 2-3-sporis, ovatis, breviter pedicellatis, mox evanescentibus; sporidiis atro-brunneis, 4-septatis constrictis, utrinque rotundatis, 39-47 × 10,5-17,5. 4372

Hab. in foliis Bosciae Caffrae (Capparidaceae), Winkle Spruit Natal (E. M. Doidge).

31. **Meliola Viburni** Syd., Ann. Mycol. 15., 1917, p. 193. — Epiphylla, plagulas minutas orbiculares 1-2 mm. diam. formans; mycelium densissimum, radians, ex hyphis septatis copiose ramosis anastomosantibus 9-10 μ crassis irregularibus saepe subtorulosis compositum; hyphopodia capitata numerosa, alternantia, piriformia, recta vel curvata 22-28 μ longa, cellula superiore 14-16 μ lata, inferiore brevi, hyphopodia mucronata non visa; setae typice nullae (vide infra); perithecia pauca in quaque plagula, globosa, 200-260 μ diam., in sicco collapsa, astoma, aterrima; asci 2-4-spori; sporae oblongae, utrinque rotundatae, fuscae, 4-septatae, leniter constrictae, 42-48 × 13-19. 4373

Hab. in foliis Viburni odoratissimi (Caprifoliaceae), Benguet, Luzon Ins. Philipp. (H. S. Jates).

32. **Meliola ditricha** (K. et Cke) Doidge, Trans. R. Soc. South Afr. V, 1917, p. 745, t. 60 fig. 20. — Ita vocanda *Asterina ditricha* K. et Cke — Syll. I, p. 50. — Perithecia globosa; sporidia 4-septata, 54 × 25, atro-brunneae. 4374

Hab. in foliis Celastri sp. (Celastraceae), Inanda, Natal Afr. (Wood).

33. **Meliola Gymnosporiae** P. et H. Syd., Ann. Mycol. X, 1912, p. 79.— 4375
Amphigena, plerumque epiphylla, crustacea, superficialis; mycelio ex hyphis dense intertextis 8-9 μ cr. brunneis composito et maculas atras minutulas, 0,5-2 mm. diam., efformante; hyphopodiis numerosissimis capitatis, alternantibus ca. 15 μ long., superne 10 μ cr.; setis nullis; peritheciis aggregatis, globosis, atris, 140-175 μ diam., rugulosis; ascis 2-4-sporis mox evanidis; sporidiis oblongis utrinque rotundatis 4-septatis, leniter constrictis, fuscis, 33-40 × 11-15.

Hab. in foliis Gymnosporiae spinosae (Celastraceae), prope Manila Ins. Philippin., America Centr. (E. D. Merrill).

34. **Meliola speciosa** Doidge, Trans. R. Soc. South Afr. V, 1917, p. 726 4376
et 744, t. 60 f. 15. — Maculis hypophyllis, rotundatis, atris 1-5 mm. diam., hyphis ramosis demum anastomosantibus, usque ad 11 μ crassis, brunneis, cellulis ca. 18 μ longis compositis; hyphopodiis capitatis numerosis, speciosis, alternis, stipitatis; cellula basali 7-11 × 5,5-7, prope hyphae angustiora, capitulo latiore quam longiore, 18-21,5 × 21,5-25, irregulari, 2-4 lobo, quoque lobo leviter bilobato; hyphopodiis mucronatis raris, pallidioribus, tenuibus, arcuatis ca. 25 × 7; setis nullis; peritheciis aggregatis, atris, 125-265 μ diam., basi appendiculis numerosis, subcylindraceis, basi 18 μ crassis; ascis 2-sporis, evanescentibus; sporidiis ellipsoideis, 3-septatis, leniter constrictis, brunneis, 52-61 × 21,5-25; conidiphoris erectis, atrofuscis, septatis, ca. 150 μ longis; conidiis fusoideis, 4-septatis, fuscis.

Hab. in foliis Gymnosporiae sp. (Celastraceae), Woodbush, Zontpausberg Dest. (E. M. Doidge). — *M. mamae* affinis.

35. **Meliola Tehoniana** Trotter n. nov.— *Meliola conferta* L. R. Tehon, Bot. 4377
Gazette 67., 1919, p. 502, tab. XVIII fig. 17-19, nec Doidge 1917.— Maculis amphigenis irregulariter circularibus, punctiformibus, 0,5-1 mm. diam.; mycelio brunneo, dense compacto, radiato, ramulis oppositis praedito, hyphis 8 μ cr.; hyphopodiis capitatis oppositis, hinc inde confertis intricatis, cellulis apicalibus e conoideis sphaeroideis, 18 × 12, cellula basali 3-6 μ longa; hyphopodiis mucronatis paucis, oppositis plerumque subapicalibus, phialaeformibus 18 μ long.; setis mycelicis nullis, perithecialibus paucis 6-8, apice obtusis, rectis, 80 × 7; peritheciis rugosis 120-135 μ diam.; ascis bisporis [?] mox evanidis; sporidiis brunneis, 4-septatis, obtusis, septis

constrictis, 40 × 15.

Hab. in foliis Rhacomatis crassopetali (Celastraceae), Mona Island, Porto Rico. — *Mel. parethesicolae* Stev. proxima.

36. **Meliola nigra** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, 4378
p. 505. — Coloniis aterrimis, setoso-velutinis, amphigenis sed in epiphyllo magis copiosis, circularibus, 1-10 mm. diam., mycelio dense reticulato-contexto, ex hyphis 7 μ cr., plerumque opposite ramosis et ramis subrectangularibus divergentibus constituto; hyphopodiis capitatis alternis, non crebris, 17 μ circ. inter se distantibus, cellula capitata obovata vel piriformi vel angulata, 14 × 10, basilari brevi, hyphopodiis mucronatis oppositis, ampulliformibus, 17 μ longis; setis perithecialibus nullis, mycelialibus copiosis, coloniam totam, margine extremo vix excepto, tegentibus, 200-270 × 7-9, ubique fuscis, curvis, saepe apice recurvis, apice obtusis; peritheciis 150-160 μ diam., leniter scabris; atris bisporis; sporidiis 4-septatis, brunneis, lenissime constrictis, obtusis, 37-41 × 14-17.

Hab. in foliis Laguncullariae racemosae (Combretaceae), Guanajibo et Joyuda, Porto Rico.

37. **Meliola Compositarum** Earle — Syll. XXII p. 51. — Var. **portoricensis** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 490.— 4379
Differt mycelio valde crassiore, rude, appendicibus latioribus et magis irregularibus quam in typo.

Hab. in foliis Eupatorii (Compositae), Porto Rico.

38. **Meliola cyclopode** Stev., Mel. Porto Rico in Ill. Biol. Monogr. II, 4380
1916, p. 484, fig. 9. — Coloniis epiphyllis, circularibus, 1-5 mm. diam.; mycelio atro, reticulum laxum efformante, 7 μ diam., ramis plerumque oppositis; hyphopodiis capitatis minutis, alternis, non valde crebris, uno pro cellula, cellulis 20-35 μ longis; cellula capitata subglobosa, 14 × 14, basilari 3-7 μ longa; hyphopodiis mucronatis oppositis, ampulliformibus, 10-18 × 6; setis mycelialibus et perithecialibus nullis; peritheciis 135-170 μ diam., verruculis conoideis asperatis; ascis mox fugacibus; sporidiis 4-septatis, brunneis, leviter constrictis, obtusis, 38 × 14.

Hab. in foliis Pseudelephantopodi spicati (Compositae), Vega Baja, Porto Rico.

39. **Meliola peltata** Doidge, Trans. R. Soc. South Afr. V 1917, p. 727, 4381
et 744, t. 61, fig. 18. — Amphigena; maculas atras, rotundatas, pilosas, 3-7 mm. latas, interdum confluentes efficiens; mycelio peritheciigero pseudo-parenchymatico, peltiformi v. flabelliformi, composito ex hyphis fuscis, ramosissimis, crebre septatis, cellulis ca.

5,5-7 × 11; hyphopodiis capitatis alternis et ramos appressis, subclavatis, stipitatis, 39-50 μ longis, cellula superiore compressa, plerumque tuberculata v. sublobulata, 28-32 μ long.; hyphopodiis mucronatis non visis; setis mycelicis numerosis, simplicibus, 10-11 μ crassis, usque ad 830 μ longis, nigris, opacis, apice acuto; peritheciis paucis, in plagulis sparsis, atris, scabris vel non, ascis non visis; sporidiis 3-septatis, nonnunquam 2-septatis et constrictis, utrinque ca. 50 × 29; mycelio conidiifero inter mycelio peritheciigero intertextis tenuiore pallidiore; conidiophoris brunneis, torulosis, flexuosis, usque ad 500 μ longis; conidiis fusiformibus non septatis, 16-18 × 10-11.

Hab. in foliis Podocarpi Thunbergii (Coniferae), Huysna, Cap. Bonae Sp. (P. I. Pienaar).

40. **Meliola Podocarpi** Doidge, Trans. R. Soc. South Afr. V, 1917, 4382
p. 725 et 723, t. 59 fig. 14. — Amphigena, plerumque epiphylla, maculas atras tenues, 2-5 mm. diam. efficiens; hyphis rectis v. subsinuosis, 6-7 μ crassis, fuscis; hyphopodiis capitatis alternis, breviter stipitatis, 14-15 μ long., cellula superiore globosa 10-12 × 10-11; hyphopodiis mucronatis non visis, setis mycelicis nullis; peritheciis sparsis v. subaggregatis, atris, globosis, verrucosis, 200-250 μ diam.; ascis 2-4 sporis; sporidiis 3-septatis, ad septa valde constrictis, leniter curvatis, utrinque attenuatis et rotundatis, 50-56 × 14-16.

Hab. in foliis Podocarpi Thunbergii (Coniferae), Woodbush, Zoutpansberg Dist. (E. M. Doidge), P. elongatae, Fort Cunningham, Toise River Huysna, C. B. S. (P. I. Pienaar).

41. **Meliola pitya** Sacc., Notae Myc. Ser. XX, Nuovo Giorn. Bot. it. 4383
23., 1916, p. 185. — Maculis amphigenis, interdum ramulicolis, effusis, continuis, opace nigricantibus, oblongis, 2-3 mm., subinde dimidium folium occupantibus, margine erosis; mycelio eximie reticulato, adpresso, hyphis filiformibus pinnato-anastomosantibus rufo-fuligineis, septatis, 7-10 μ cr., hyphopodiis obovoides, prope basim 1-septatis, 12-14 × 12, pinnatim subalterne dispositis, omnibus conformibus; setis nullis; peritheciis initio globosis, 90-100 μ diam., demum collabescendo umbilicato-subcupulatis 150-180 μ diam., opace nigris, contextu parenchymatico, fuligineo; ascis sporidiisque non visis.

Hab. in foliis ramulisque adhuc vegetis Taxi canadensis (Coniferae), Caroga, N. Y., Amer. bor. — Cum *Meliolae* species raro in Coniferis sint observatae, praesentem, etsi (causa ignota) ste-

rilem, tamen typicam, Auctor noluit praeterire.

42. **Meliola Connari** H. S. Yates, Philipp. Journ. Sc. Manila, XII (1917) p. 364 (*M. Connariae*). — Amphigena, maculas orbiculares vel irregulares 1-2 cm. latas atras velutinas formans, saepe confluentes et magnam partem folii occupantes; mycelio ex hyphis septatis brunneis radiantibus ramosis 8-11 μ latis composito; hyphopodiis capitatis alternantibus vel irregularibus, cellula superiore oblonga 15-20 μ longa, 18-22 μ lata, cellula basali 8-10 μ longa; hyphopodiis mucronatis paucis, alternantibus vel oppositis, ampulliformibus, usque ad 25-30 μ longis; setis mycelicis numerosis, saepe prope basim perithecii, erectis, rectis vel leviter curvatis, 600-700 μ longis, 12-15 μ latis, atris, opacis, simplicibus, acutis vel obtusis; peritheciis numerosis, globosis, atris, tuberculatis, 150-170 μ diam.; ascis oblongo-ovatis, 60-70 μ longis, 35-40 μ latis, 2-4-sporis; sporidiis oblongis, utrinque late rotundatis, 4-septatis, ad septa constrictis, obscure brunneis, 50-55 μ longis, 20-25 μ latis. 4384

Hab. in foliis Connari sp. (Connaraceae), Basiad, pr. Tayabas Luzon, Ins. Philipp.

43. **Meliola Roureae** Syd., Ann. Mycol., 15., 1917, p. 191. — Syn. *M. Roureae* H. S. Yates, Philipp. Journ. of. Sc. 13., 1918, p. 370. — Amphigena, plus minus effusa, mycelium rectangulariter ramosum ex hyphis obscure castaneo-brunneis flexuoso-torulosis septatis 7-9 μ crassis compositum, hyphopodia sat numerosa alternantia irregularia, 20-26 μ alta, cellula superiore 10-14 μ lata, integra, angulata vel recurvata, subinde etiam leniter lobulata, cellula basali multo breviori, hyphopodia mucronata opposita vel unilateralia, plerumque e basi conoidea apicem versus sensim attenuata, 22-26 μ longa, basi 8-10 μ lata; setae myceliales numerosae simplices, rectiusculae usque subfalcatae, 600-900 μ longae, basi 10-12 μ latae biformes; aliae tota longitudine opacae, ad apicem acutae, aliae ad apicem non vel vix tenuiores, late rotundatae vel potius truncatae et plus minusve pellucidae; perithecia sparsa, globosa, 150-200 μ diam., glabra; asci 2-spori; sporae oblongo-cylindraceae, sordide fuscae, 4-septatae, vix vel leniter constrictae, utrinque rotundatae, 40-44 × 16-19. 4385

Hab. in foliis Roureae erectae (Connaraceae), Rizal, Luzon, Ins. Philipp. (M. Ramos).

44. **Meliola ipomoeicola** Beeli, Bull. Jardin Bot. Etat Bruxelles v. 7., 1920, p. 96. — Epiphylla, maculas irregulares atras parvas 0,5-1 mm. efformans; mycelio parce evoluto, hyphis leniter sinuosis brun- 4386

neis 12-15 × 6-8; hyphopodiis numerosis capitatis, alternis, raro suboppositis v. unilateralibus, cellula apicali subglobosa, 12 μ diam., basilari brevissima v. nulla; hyphopodiis mucronatis oppositis; setis mycelicis numerosis sparsis brunneis septatis rectis et rigidis simplicibus apice acutis, 200-300 × 6-9; peritheciis verrucosulis, nigris astomis, 100-200 μ diam.; ascis non visis; sporidiis 4-septatis, ad septa constrictulis, obtusis brunneis, 38-40 × 16.

Hab. epiphylla in foliis I p o m o e a e sp. (Convolvulaceae), Congo Africae trop. (VANDERYST). — *M. Ipomoeae* Earle (Syll. XVII p. 549) nec Rehm, Ascom. Exsicc. fasc. 55., n. 2104 proxima, differt sporidiis majoribus, setis mycel. acutis, hyphopod. capitatis alternis numerosis, quandoque unicellularibus globulosis.

45. **Meliola quadrifurcata** Rehm, Ascomyc. Philipp. I in Philipp. Journ. 4387
of Sci., 8., (1913) p. 181.— Mycelio in maculis epiphyllis brunneolo-flavescentibus haud definitis plagulas velutinas plus minusve orbiculares, vix confluentes, 1,5-3 mm. latas, atras, medio incrassatas, arachnoideo-marginatas efformante; hyphis mycelii centrifugis, plerumque rectis, vix ramosis, fuscis, septatis, 6 μ cr., hyphopodia alternantia, capitata, 2-cellularia gerentibus, ca. 20 μ altis, cellula superiore subglobosa ca. 12 μ lata, hyphopodiis mucronatis haud conspicuis; peritheciis in centro mycelii aggregatis, versus basim verruculosis, atris, glabris, poro non pertusis, usque ad 250 μ diam., juxta basim setis plurimis, erectis, nigro-fuscis, septatis, usque ad 150 μ alt. 9 μ cr., ad apicem in ramos 4, raro 2 vel 3, erectos, plerumque recurvos, obtusos, haud denticulatos, 80-120 × 5, septatos, dilute fuscidulos furcatis; ascis ellipticis, 2-4-sporis; sporidiis oblongis, utrinque rotundatis, 4-septatis, fuscis, 35-40 × 12-14.

Hab. ad folia I p o m o e a e (Convolvulaceae), Luzon, prov. Laguna, Los Baños, ins. Philipp. (C. F. BACKER). — Setis perithecii 4-furcatis praecipue distincta; *M. furcatae* Gaill. et *M. patenti* Syd. affinis.

46. **Meliola Merremiae** Rehm, Ascomyc. Philipp. II, in Philipp. Journ. 4388
of Sci. VIII (1913) p. 253. — Mycelio epiphyllo plagulas orbiculares nigras vix radiantes 1-1,5 mm. latas formante, ex hyphis rectis, centrifugis, fuscis, septatis, 7-8 μ latis rectangulariter dichotomis, arcte juxtapositis; hyphopodiis plurimis, rectis, obtusis, 2-cellularibus, cellula inferiore perparvula, in longa serie propinque oppositis, fuscis, 10-12 × 6; hyphopodiis uncinatis oppositis, mucronatis, fuscis, 15 × 6; setis mycelialibus rectis, septatis, ad basim usque ad 10 μ latis, apice obtusis, fuscis; peritheciis sparsis,

globulosis, astomis, haud verruculosis, atris, ca. 120 μ diam.; ascis?; sporidiis oblongis, rectis, obtusis, 4-septatis, fuscis, 30-35 × 10-12.

Hab. in foliis Merremiae hastatae, Luzon, Prov. Laguna, Los Baños, ins. Philipp. (C. F. Baker). — A *M. praetervisa* Gaill. differt sporidiis valde minoribus et setis obtusis; a *M. malacotricha* Speg. hyphopodiis alienis.

47. **Meliola Hervittiae** Rehm, Ascomyc. Philipp. II, in Philipp. Journ. of Sci. VIII (1913) p. 253. — Mycelio maculas orbiculares epiphyllas, 2-2,5 mm. latas, interdum confluentes, nigras, tenuissimas, margine subarachnoideas formante, ex hyphis sparse ramosis, 6-7 μ cr., fuscis, arcte aggregatis, breviter cellularibus; hyphopodiis capitatis numerosissimis, oppositis, oblongis, 2 cellularibus, breviter stipitatis, cellula superiore obtusa, 15 × 7; hyphopodiis mucronatis oppositis vel solitariis, ampulliformibus, pallidioribus, usque ad 17 × 6-10; setis mycelialibus sparsis, erectis, ca. 200 μ longis, ad basim 7 μ latis, apice acutatis, fuscis; peritheciis sparsis, globulosis, astomis, haud verrucosis, nigris, 130 μ circ. diam.; ascis 2- vel 3-sporis; sporidiis cylindraceis, utrinque obtusis, rectis, 4-septatis non constrictis, dilute fuligineo-fuscis, 35-37 × 14. 4389

Hab. in foliis decoloratis Hervittiae sublobatae (Convolvulaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (C. F. Baker). — Species facile dignoscenda.

48. **Meliola Alangii** Syd., Ann. Mycol., 14., 1916, p. 355.— Amphigena, plagulas parum visibiles primo minutas 1-2 mm. diam. dein plus minus confluentes tenues arachnoideas formans; mycelio matrici arcte appresso repente, rectangulariter ramoso, ex hyphis 6-8 μ crassis fuscis septatis composito; hyphopodiis capitatis sat numerosis, alternantibus, totis 12-18 μ longis, cellula superiore globulosa vel saepius ovata integra 8-10 μ crassa, inferiore breviore; hyphopodiis mucronatis alternantibus vel oppositis, 18 24 μ longis, in collum longum productis; setis mycelii modice copiosis, rectis vel fere rectis, 300-600 μ longis, ad basim 7-8 μ crassis, sursum attenuatis, sed apicibus obtusis, tota longitudine opacis vel subinde ad apicem parum dilutioribus; peritheciis sparsis globosis, parum tuberculatis, 140-170 μ diam., in sicco collapsis; ascis fugacibus 2-3-sporis; sporidiis cylindraceis, 4-septatis, parum vel leniter constrictis, fumoso-brunneis, utrinque obtusis, 25-30 × 9-11. 4390

Hab. in foliis Alangii begoniaefolii (Cornaceae), Los Baños ins. Philippin. (C. F. Baker).

49. **Meliola Cucurbitacearum** Stev., Mel. Porto Rico, in Ill. Biol. Mo- 4391

nogr. II, p. 526, fig. 51. — Coloniis epiphyllis, circularibus, 1-3 mm. diam., mycelio atro, reticulum sat compactum efformante, 7 μ crasso, ramis plerumque alternis; hyphopodiis capitatis alternis, haud crebris, uno pro cellula, cellulis 17-24 μ longis, cellula capitata ovoidea, lobata, 17 × 14, basilari 7 μ longa; hyphopodiis mucronatis alternis vel oppositis, phialiformibus, 20 × 5, rostro tenui, uncinato; setis perithecialibus nullis, mycelialibus in partibus coloniarum vetustis copiosis, 190 × 9, ubique fuscis, apice simpliciter vel bis dichotomo-ramosis, rectangulariter dispositis, primariis 15-35 μ, secundariis subaequalibus, apice acutis; peritheciis 120 μ diam., scabris; ascis mox evanescentibus; sporidiis 4-septatis, brunneis, leniter constrictis, obtusis, 41 × 14.

Hab. in foliis caulibusque C a y a p o n i a e ? (Cucurbitaceae), El Alto de la Bandera, Porto Rico. — Dichotomia setarum et hyphopodiis lobatis perdistincta.

50. **Meliola malacotricha** Speg., Syll. IX, p. 425 — var. **major** Beeli, Bull. Jard. Bot. État Bruxelles v. 7., 1920, p. 96. — A typo differt sporidiis longioribus, 44 × 16, setis mycel. etiam majoribus 350-400 × 8, hyphopodiis capitatis oppositis numerosissimis confertis. 4392

Hab. in foliis C u c u r b i t a c e a e (?), Wombali Congo, Africa trop. (VANDERYST). — Var. **longisporae** Gaill. affinis et verisimiliter eadem, matrice tantum diversa.

51. **Meliola confragosa** Syd. in Leaflets of Philipp. Bot. V (1912) p. 1536. — Mycelio plagulas minutas tantum epiphyllas, rotundatas vel irregulares, 0,5-2 mm. latas, atras, tenues efformante vel subinde totam folii superficiem plus minusve aequaliter obducente, ex hyphis laxiuscule ramosis, torulosis flexuosisque, fuscis, 6-9 μ cr. composito; hyphopodiis capitato-clavatis, alternis, saepe truncatis vel ad apicem irregularibus, 20-28 μ longis, superne 10-14 μ latis; setis nullis; peritheciis laxiuscule gregariis, globosis, atris, grosse tuberculatis (tuberculis valde prominulis), 100-175 μ diam., opacis; ascis late clavatis, bisporis, 38-50 × 14-22; sporidiis oblongis, 4-septatis, parum constrictis, utrinque rotundatis, 25-32 × 9-10, olivaceo-brunneis. 4393

Hab. in foliis vivis C u c u r b i t a c e a e quaedam, Brooks Point, Palawan, ins. Philipp.

52. **Meliola Mapaniae** H. S. Yates, Philipp. Journ. Sc. Manila, XII (1918) p. 367. — Amphigena, maculas atras, orbiculares, 1-5 mm. diam., saepe confluentes; mycelio ex hyphis brunneis septatis e peritheciis radiantibus 8-12 μ crassis composito; ramis oppositis; hy- 4394

phopodiis capitatis numerosis, alternantibus, cellula superiore globosa vel subglobosa, 15-17 μ diam., cellula inferiore 10-14 μ longa; hyphopodiis mucronatis numerosis plerumque alternantibus, ampulliformibus, usque ad 20-30 μ longis; setis mycelicis numerosis, erectis, rectis, atris, opacis, 500-800 μ longis, 15 μ crassis simplicibus, acutis; ascis non visis; sporidiis oblongis, 4-septatis, ad septa constrictis brunneis, utrinque late rotundatis, 52-56 μ longis, 22-26 μ latis.

Hab. in foliis Mapaniae sp. (Cyperaceae), Catubing River Samar, Ins. Philipp.

53. **Meliola intricata** Syd., Enum. Philipp. Fungi I, in Philipp. Journ. 4395
of Sci. VIII (1913) p. 268. — Amphigena vel culmicola, maculas circulares vel oblongas 2-8 cm. longas, sparsas vel confluentes, atras formans; mycelio ex hyphis densissime intertextis et rete fere continuum efformantibus, ramosis, septatis, fuscis, 7-11 μ latis composito; hyphopodiis capitatis numerosissimis, alternantibus, 18-26 μ longis, rectis vel curvatis, cellula superiore 10-14 μ crassa, rotundata vel parum lobato-incisa, inferiore 4-8 μ longa, 5-7 μ lata; setis mycelicis numerosis, rigidis, erectis vel basi abrupte geniculatis, atris, opacis, apice acutiusculis, 500-800 × 12-17; peritheciis paucis in quaque macula, globosis, 150-200 μ diam., atris, tuberculatis; ascis late ovatis, 2-4-sporis, mox evanescentibus; sporidiis oblongis, 4-septatis, leniter constrictis, utrinque obtusis, fuscis, 32-38 × 11-12.

Hab. in foliis culmisque Scirpi grossi (Cyperaceae), Luzon, Manila, ins. Philipp. (Merrill). — Rete myceliali hyphopodiis abunde praedita et setis crassis praecipue distincta. — Var. **major** Beeli, Bull. Jard. Bot. Etat Bruxelles v. 7., 1920, p. 96. — A typo differt sporidiis majoribus 42-46 × 14-16, setis mycelicis angustioribus 700-800 × 6-10. — *Hab.* epiphylla in Monocotyledoneae sp., Kwilu, Congo Africae trop. (Vanderyst).

54. **Meliola Hopeae** H. S. Yates, The Philipp. Journ. of Sc., Bot. 13., 4396
1918, p. 369. — Hypophylla, maculas atras, 1-2 cm. diam. orbiculares formans; mycelio laxo radiante ex hyphis brunneis 5-7 μ latis septatis composito; ramis oppositis vel alternantibus; hyphopodiis capitatis numerosis, plerumque alternantibus, cellula superiore ovoidea, 10 μ diam., cellula inferiore 5 μ longa; hyphopodiis mucronatis numerosis, plerumque irregularibus, ampulliformibus, usque ad 15-25 μ longis; setis perithecii et mycelicis circa 6 ad basim perithecii positis, erectis, basi geniculatis 300-400 μ longis,

8 μ latis, septatis, apicis simplicibus, obtusis; peritheciis rotundatis, applanatis, atris, opacis, tuberculatis, 100-140 μ diam.; ascis evanescentibus 2-4-sporis; sporidiis oblongis, utrinque late rotundatis, 4-septatis, ad septa non constrictis, brunneis, 35-38 × 12-14.

Hab. ad folia Hopeae sp. (Dipterocarpaceae), Mount Cadig Prov. Tayabas, Luzon, Ins. Philipp. (YATES).

55. **Meliola Yatesiana** Trotter n. nov. — *Meliola Diospyri* H. S. Yates, Philipp. Journ. of Sc. Manila, XII (1917) p. 364 nec Sydow 1911 (*M. Diospyriae*). — Amphigena, plerumque epiphylla, maculas atras, velutinas, orbiculares vel irregulares formans; mycelio abundante ex hyphis obscure brunneis 8 μ crassis composito; hyphis matrici adpressis; ramis oppositis vel irregularibus; hyphopodiis capitatis numerosis, oppositis, cellula superiore subglobosa, 12-15 μ lata, cellula inferiore 4-5 μ longa; hyphopodiis mucronatis paucis, ampulliformibus, usque ad 20 μ longis; setis mycelicis numerosis, erectis, rectis, vel leviter curvatis, 500-650 μ longis, 10 μ latis, atris, opacis, simplicibus, acutis; peritheciis paucis in quaque macula, globosis, atris, tuberculatis, 80-120 μ diam., ascis non visis; sporidiis cylindraceis, utrinque late rotundatis, 4-septatis, ad septa leviter constrictis, brunneis, 45-55 μ longis, 20-22 μ latis. 4397

Hab. in foliis Diospyri discoloris (Ebenaceae), Basiad, Prov. Tayabas, Luzon Ins. Philipp.

56. **Meliola Diospyri** Syd. in Syd., et Butl., Ann. Mycol. IX, 1911, p. 381. — Amphigena; mycelio maculas orbiculares 3-5 mm. latas atras formante; hyphis fuscis, 5-8 μ cr., hyphopodia numerosa capitata opposita usque 17 μ longa gerentibus; setis mycelii rectis, rigidis, simplicibus, atro-brunneis, opacis, 350-700 μ long., 9-15 μ cr.; peritheciis globosis, 130-175 μ diam., in sicco collabescentibus; ascis 2-4 sporis; sporidiis 4-septatis, leniter constrictis, fuscis, utrinque rotundatis, 36-41 × 12-16. 4398

Hab. in foliis Diospyri montanae (Ebenaceae), Sidrabunna, Koppa, Mysore Indiae or. (E. J. BUTLER).

57. **Meliola Elaeocarpi** H. S. Yates, Philipp. Journ. Sc. Manila, XII (1917) p. 365 (*M. Elaeocarpeae*). — Amphigena, plagulas atras, pelliculosas, orbiculares, 1-6 mm. diam., saepe confluentes efformans; mycelio ex hyphis ad basim perithecii centrifugis ramosis oppositis brunneis septatis 6-10 μ latis composito; hyphopodiis capitatis numerosis, oppositis, cellula superiore ovoidea, 10-12 μ diam., cellula basali 5-6 μ longa; hyphopodiis mucronatis paucis, irregularibus vel oppositis, ampulliformibus, 15-18 μ longis 6-8 μ latis; setis mycelicis 4399

erectis, rectis vel ad basim geniculatis simplicibus, 300 μ longis, 10-12 μ latis, atris, opacis, apicem versus brunneis, acutis vel obtusis; peritheciis paucis in quaque macula, subglobosis, obscure brunneis tuberculatis, 100-120 μ diam., ascis evanescentibus; sporidiis 4-septatis, brunneis, ad septa constrictis, utrinque late rotundatis, 55 μ longis 22 μ latis.

Hab. in foliis Elaeocarpi (Elaeocarpaceae), Benguet Luzon, Ins. Philipp.

58. **Meliola callosperma** Spegaz., Rel. Mycol. trop. etc. in Bol. Ac. Nac. 4400
Cienc. Cordoba, t. 23., 1919, Extr. p. 89. — Maculis nullis; plagulis subicularibus saepius epiphyllis parvis orbicularibus 2-8 mm. diam. subcrustaceis glaberrimis atris, hyphis rectiusculis alterne ramosis, 8-10 μ cr., hyphopodiis subglobosis, 10-15 × 15, sessilibus donatis, apice circa perithecia praecipue ramulis sensim abbreviatis subclavulatis et fere hyphopodiiformibus praeditis; peritheciis depresse globosis, in sicco collabescentibus, glabris, astomis, 150-200 μ diam.; ascis elliptico-clavulatis, breviter pedicellatis, longe tenuiterque paraphysatis, 8-sporis, 100-120 × 25-30; sporis elongato-subfusoideis, leniter clavulatis transverse 5-septatis, ad septum medium tantum constrictulis, levibus, roseo-fuligineis.

Hab. ad folia viva Gaylussaciae? sp. (Ericaceae), prope Apiahy, America austr. (J. Puiggari).

59. **Meliola arecibensis** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. 4401
II, 1916, p. 491, fig. 18. — Coloniis hypophyllis, irregularibus, 1-3 mm. diam.; mycelio reticulum sat densum efformante ex hyphis 6 μ circ. diam., leniter sinuosis, opposite vel alterne ramosis constituto; hyphopodiis capitatis alternis in quaque cellula solitariis, cellulis 10-17 μ longis, cellula capitata ex ovoidea cuneata vel omnino irregulari, 20 × 10, basilari brevi vel usque ad 20 μ longa; hyphopodiis mucronatis copiosis, plerumque oppositis, ampulliformibus, angustis, 20 μ longis; setis mycelialibus nullis; appendicibus perithecialibus paucis, 4-8, larviformibus, brevibus, circ. 85 × 20, curvatis vel sinuosis, pellucidis, apice obscurioribus; peritheciis 200 μ diam., ob papillas rotundatas scabris, non ostiolatis; ascis mox evanidis; sporidiis 4-septatis, obscure brunneis, valde constrictis, obtusis, 44-51 × 20.

Hab. in foliis Acalyphae bisetosae (Euphorbiaceae), Dos Bocas prope Utuado, Porto Rico. — *M. Acalyphae* appendicibus chitinosis et structura hyphopodiorum bene distincta.

60. **Meliola Acalyphae** Rehm, Ascomyc. Philipp. II, in Philipp. Journ. 4402

of Sci. VIII (1913) p. 252. — Mycelio imprimis hypophyllo, plagulas sparsas, nigras, raro confluentes, orbiculares, 0,5-1,5 mm. latas formante, ex hyphis ad basim perithecii centrifugis, rectis, vix ramosis usque ad 10 μ latis, septatis, parvicellularibus, arcte agglutinatis, fuscis, apice dichotomis composito; hyphopodiis permultis, oblongis, obtusis, rectis, 2-cellularibus, oppositis, fere juxtappositis, 20 × 10; hyphopodiis uncinatis fuscis, oppositis, raris, usque ad 20 × 10; setis nullis; peritheciis in medio mycelii paucis, sessilibus, globulosis, atris haud ostiolatis, ex cellulis magnis, convexule prominentibus contextis, circ. 150 μ diam.; ascis bisporis; sporidiis oblongis, obtusis, rectis, 4-septatis, vix ad septa constrictis, fuscis, 30-35 × 12-14.

Hab. in foliis Acalyphae stipulaceae (Euphorbiaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (C. F. Baker).

61. **Meliola luzonensis** Syd., Ann. Mycol. 15., 1917, p. 188. — Amphigena, plerumque epiphylla, plagulas orbiculares vel irregulares 3-8 mm. diam. saepe confluentes formans; mycelium ex hyphis radiantibus rectangulariter ramosis obscure-brunneis 7-9 μ crassis septatis compositum; hyphopodia capitata numerosissima, plerumque perfecte opposita, cylindracea semper integra, 15-22 μ longa, 8-10 μ lata; hyphopodia mucronata non visa, setae mycelicae modice copiosae, 600-900 μ longae, basi 10-12 μ latae, apicem versus sensim attenuatae, semper acutae, tota longitudine opacae, atrae, simplices, rectae vel leniter curvatae; perithecia laxe aggregata, globosa, astoma 140-180 μ diam.; asci 2-3 spori; sporae oblongae, utrinque rotundatae, 4-septatae, leniter constrictae, fuscae 32-36 × 12-15, loculis aequalibus. 4403

Hab. in foliis Antidesmae spec. (Euphorbiaceae), prov. Bataan, Luzon, Ins. Philipp. (M. Ramos). — Affinis *M. oppositae* sed hyphopodia cylindrica.

62. **Meliola Colliguajae** Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires XXIII p. 40 (1912). — Caespitulis epiphyllis, subdiscoideis, 2-8 mm. diam., non raro confluendo difformibus, pro parte setulosis, tenuissime fibrilloso-araneosis et siccando plus minusve deciduis; hyphis confertiusculis, intertextis, alterne ramosis, subflexuosis 8-9 μ cr., hyphopodiis alternis arcte antrorsum adpressis, rarissime ampulliformibus et oppositis plus minusve laxe ornatis; setulis praecipue circa perithecia evolutis, erectis, 100-400 × 8-10, leniter flexuosis, atris; peritheciis subglobosis 150-250 μ diam., in sicco collabescentibus, atris, glabris, subcarbonaceis, parce papil- 4404

losis, astomis, contextu opaco indistincto; ascis non visis; sporidiis cylindraceis, utrinque obtusissime rotundatis, quadriseptatis, ad septa leniter constrictis, 38-45 × 14-18, obscure fuligineis, loculis omnibus subaequalibus.

Hab. in foliis vivis Colliguajae brasiliensis (Euphorbiaceae), in silvis prope Puerto Leòn, Misiones: Argentina.

63. **Meliola gymnanthicola** Stev., Mel. Porto Rico, in Ill. Biol. Mo- 4405
nogr. II, 1916, p. 517. — Coloniis epiphyllis, circularibus, 2-4 mm. diam.; mycelio reticulum densum efformante, hyphis 7 μ cr. ramis plerumque oppositis saepeque rectangulariter insertis; hyphopodiis capitatis alternis, haud crebris, in quaque cellula singulis, cellulis 20 μ circ. longis, cellula capitata ovoidea vel subcylindrica, 17 × 10, basilari 2-3 μ longa; hyphopodiis mucronatis alternis vel oppositis e conoideis ampulliformibus, irregularibus, 16-18 × 7; setis perithecialibus, nullis, mycelialibus sparsis, leniter undulatis, 300 × 7, apice obtusis, atris; peritheciis 190 μ diam., scabriusculis; ascis mox evanidis; sporidiis 4-septatis, brunneis, lenissime constrictis, obtusis, 37 × 17.

Hab. in foliis Gymnanthis lucidae (Euphorbiaceae), Guayanilla, Porto Rico.

64. **Meliola Heveae** Vincens in Bull. Soc. Path. végét. Fr. II (1915) 4406
p. 26, c. ic. — Maculis vage circularibus, 2 mm. circ. diam., e mycelio repente, arcte adnato, radiante, fusco constitutis; hyphis copiose dichotomice ramosis, 7-9 μ cr., crebre septatis, ad septa constrictis, propagulis (hyphopodiis) 1-2-pluricellularibus ornatis; peritheciis atris, sphaeroideis, 250 μ diam.; setis rigidis, brunneis, basi dilatatis, apice plus minusve angustatis, 55-60 × 9-12, ornatis; ascis ellipsoideis, bisporis, 60-70 × 40-50; sporidiis cylindracco-ellipsoideis, utrinque obtusis, 4-septatis, ad septa constrictulis, fuscis, 45-50 × 16-18.

Hab. in foliis Heveae sp. (Euphorbiaceae), in America tropicali.

65. **Meliola Ramosii** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 552.— 4407
Epiphylla, plus minus effusa, maculas atras parum conspicuas subarachnoideas 1-3 mm. latas v. confluendo majores et irregulares formans; mycelio modice evoluto, ex hyphis ramosis anastomosantibusque fusco-brunneis 6-7,5 μ crassis composito; hyphopodiis capitatis alternantibus, modice copiosis, cellula basali brevi v. brevissima, superiore late rotundata subglobosa, obscure brunneis, totis 16-22 × 11-15; hyphopodiis mucronatis ampulliformibus, op-

positis, 18-22 μ long.; setis mycelicis numerosis, basi saepe abrupte geniculatis, circa perithecia oriundis, erectis, rectis, simplicibus, 2-5-septatis, fusco-brunneis, apice late rotundatis, 120-200 × 7-8; peritheciis sparsis, globulosis, in sicco profunde collapsis, 140-175 μ diam., parum tuberculatis, ostiolatis; ascis subglobosis v. ovatis, 2-4 sporis, 32-42 × 25-32; sporidiis oblongis, utrinque late rotundatis, 4-septatis, leniter constrictis, brunneis, 26-32 × 12-14.

Hab. in foliis Homonoiae ripariae (Euphorbiaceae), Antipolo prov. Rizal Luzon, Ins. Philippin. (M. Ramos).

66. **Meliola Jatrophae** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 516. — Coloniis epiphyllis, circularibus vel irregularibus, 1-4 mm. diam.; mycelio ex hyphis 7 μ crassis, ramis plerumque oppositis, laxe reticulato-contextis efformato; hyphopodiis capitatis alternis vel irregulariter dispositis, angulo acuto insertis, 27 μ circ. inter se distantibus, cellula capitata ovoidea, 17 × 7, apice obtusa, basilari brevi; hyphopodiis mucronatis copiosis et in ramis nonnullis dense confertis, oppositis, ampulliformibus; setis perithecialibus nullis, mycelialibus paucis, basi peritheciorum excepta ubi numerosae adsunt, curvis, 250 μ circ. longis, fuscis, apice acutis; peritheciis 130-150 μ diam., scabriusculis; ascis mox evanidis; sporidiis cylindraceis, 4-septatis, brunneis, leniter constrictis, obtusis, brevibus, crassis, 30 × 17. 4408

Hab. in foliis Jatrophae hernandifoliae (Euphorbiaceae), Rio Tanama et Dos Bocas, Porto Rico. — Crassitie sporidiorum structura et insertione hyphopodiorum praecipue distincta.

67. **Meliola Macarangae** Syd., Ann. Mycol., 15., 1917, p. 188. — ? Syn. *M. Macarangae* H. S. Yates, Philipp. Journ. of Sc. 12., 1917, p. 367.— Hypophylla vel caulicola, rarius etiam epiphylla, plagulas orbiculares 3-10 mm. latas velutinas aterrimas, crassiusculas formans: mycelium ex hyphis densissime ramosis et intertextis 8-9 μ crassis castaneo brunneis compositum, ramulis plerumque brevibus; hyphopodia capitata sat numerosa irregularia, 22-28 μ longa, cellula superiore 15-18 μ lata angulata vel parum lobata, cellula inferiore mox brevi mox longiore; setae mycelii copiosissimae, rectae vel parum subinde flexuosae, atrae, opacae, sublanceolatae, ad apicem acutatae, 180-350 μ longae, basi 9-12 μ latae; perithecia copiose aggregata, globosa, 170-200 μ diam., glabra; asci 2-rarius 3-spori; sporae oblongae 4-septatae, vix vel leniter constrictae utrinque rotundatae, in maturitate obscure castaneo-brunneae, 40-52 × 12-22, cellulis duabus extimis minoribus. 4409

Hab. in foliis Macarangae Tanarii et M. bicoloris (Euphorbiaceae), San Antonio, Laguna, Luzon Ins. Philipp. (M. Ramos et R. C. Mc Gregor).

68. **Meliola apayaoensis** H. S. Yates, The Philipp. Journ. of Sc., Bot., 13., 1918, p. 364. — Amphigena, plerumque epiphylla, plagulas atras, velutinas, orbiculares, 3-8 mm. diam. efformans; mycelio ex hyphis radiantibus brunneis septatis 6-7 μ latis composito, articulis 25-35 μ longis; hyphopodiis capitatis numerosis, alternantibus, vel unilateralibus, bicellularibus, cellula superiore ovata vel lobata 15-18 μ diam., cellula inferiore 6-10 μ longa; hyphopodiis mucronatis non visis; setis mycelicis numerosissimis, erectis, rectis vel leviter curvatis, atris, opacis, versus apicem brunneis, acutis, 200-280 μ longis, 10-12 μ cr.; peritheciis paucis, globosis, tuberculatis, atris, opacis, 175-200 μ diam.; ascis bisporis, 50-60 × 20-30; sporidiis 4-septatis, ad septa leviter constrictis, subcylindraceis, utrinque rotundatis, brunneis 50-58 μ longis, 13-16 μ latis. 4410

Hab. in foliis Macarangae Tanarii (Euphorbiaceae), Subprov. Apayao, Luzon, Ins. Philipp. (Felix).

69. **Meliola subapoda** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 547.— Hypophylla, plagulas orbiculares $^1/_2$-1 cm. diam. tenues formans; mycelio ex hyphis longis rectis v. flexuosis 5-7 μ cr. remote septatis (articulis 30-50 μ long.) fuscis non v. parce ramosis composito; hyphopodiis capitatis rarissimis v. fere nullis, continuis, 16-20 × 8-10, integris v. irregularibus; setis nullis; peritheciis laxe gregariis v. sparsis, globulosis, grosse verrucosis, 140-190 μ diam.; ascis ovatis, 2-3-sporis; sporidiis ellipsoideis, utrinque attenuatis, 4-septatis, constrictis, obscure castaneo-brunneis, 36-39 × 13-15, loculis mediis majoribus. 4411

Hab. in foliis Malloti philippinensis (Euphorbiaceae), Angat prov. Bulacan Ins. Philippin. (M. Ramos).

70. **Meliola sauropicola** H. S. Yates, Philippin. Journ. Sc. Manila, XII (1917) p. 368. — Epiphylla, rariter caulicola, maculas dispersas, atras, orbiculares, 2-4 mm. diam., saepe confluentes; mycelio ex hyphis ad basim perithecii centrifugis rectis septatis ramosis 6-8 μ latis composito; hyphopodiis capitatis-numerosis, alternantibus vel irregularibus, bicellularibus, cellula superiore 15-20 × 10-12, inferiore 8-10 μ longa; hyphopodiis mucronatis numerosis, alternantibus vel irregularibus, ampulliformibus, usque ad 20 μ longis; setis mycelicis erectis, rectis vel leviter curvatis, 500-650 × 12-15, inferne opacis, atris, apicem versus obscure brunneis, obtusis, simplicibus; 4412

peritheciis rotundatis, applanatis, 110-160 μ diam., contextu ex cellulis plus minus radiantibus 6-8 μ diam. composito, in sicco collapsis; ascis evanescentibus, circiter 2-4-sporis: sporidiis cylindraceis, utrinque rotundatis 4-septatis, ad septa leviter constrictis, fuscis, 42-45 × 15-17.

Hab. in foliis Sauropi sp. (Euphorbiaceae), Catubing River, Ins. Philipp. (Ramos).

71. **Meliola pteridicola** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 396, fig. 27. — Coloniis amphigenis, plerumque vero epiphyllis, 1-6 mm. diam.; mycelio laxe reticulato, ex hyphis subrectis, saturate fuscis, obscure septatis, subparallelis, ramosis constituto; hyphopodiis capitatis alternis vel irregularibus, non crebris, 30 μ circ. inter se distantibus, ovoideis vel piriformibus, 17 × 3, apice incrassatis, cellula basilari brevissima; hyphopodiis mucronatis paucis et sparsis vel in ramis quibusdam copiosis, alternis vel oppositis, tenuibus, phialiformibus, 16-18 × 7, rostro augusto; setis mycelialibus nullis, perithecialibus paucis, 3-10, fuscis, rectis vel apice leniter incurvis, 90 × 7; peritheciis 170 μ diam., ob papillulas rotundatas 6-10 μ prominentibus scabris, non ostiolatis; ascis mox evanidis; sporidiis 4-septatis, brunneis, lenissime constrictis, obtusis, 35-40 × 4. 4413

Hab. copiosa in foliis petiolisque Aneimiae et Adianti spec. plur. (Filices), Porto Rico. — Ob hyphas subparallele decurrentes praecipue distincta.

72. **Meliola Paulliniae** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 513. — Coloniis atris, setosis, circularibus, epiphyllis, 3-8 mm. diam.; mycelio ex hyphis rectis, opposite ramosis, 8 μ cr., radiatis, laxe reticulato-contextis efformato; hyphopodiis capitatis alternis, saepe rectangulariter insertis, haud crebris, singulis in quaque cellula, cellulis 34 μ circ. longis, cellula capitata ovoidea 17 × 14, basilari brevi, hyphopodiis mucronatis saepius oppositis, phialiformibus, rostro tenuiusculo; setis perithecialibus nullis, mycelialibus copiosis, rectis, simplicibus, ubique atris, rigidis, abrupte acutatis, 275-500 × 8-9; peritheciis 150-160 μ diam.; ascis evanescentibus; sporidiis 37-40 × 14-15, 4-septatis, constrictis, obtusis. 4414

Hab. in foliis Casearіae (Flacourtiaceae), Mammeae (Guttiferae), Paullіniae (Sapindaceae), Porto Rico. — Specimina in Casearia et in Mammea interdum a typo paullo recedunt. Species *M. polytrichae* affinis. .

73. **Meliola Tonduzi** Spegaz., Fungi Costaric. nonn., in Bol. Ac. Nac. 4415

Cienc. Cordoba, t. 23., 1919, Extr. p. 190. — Amphigena; plagulae orbiculares parvae 3-5 mm. diam. v. confluendo magnae 8-15 mm. ac difformes, aterrimae; hyphae repentes rectiusculae oppositae ramosae, 7-10 μ cr., hyphopodiis saepius oppositis obovatis, 20-25 × 12-15, nonnullis ampulluliformibus intermixtis, laevibus, setulis parum numerosis erectis rectis opacis rigidulis apice subobtusiusculis praeditae; perithecia disco hypocarpico destituta, globosa glabra subpapillulosa, non collabescentia, astoma nigerrima opaca 120-150 μ diam.; asci elliptici 2-4-spori, 80-120 × 40; sporae cylindraceo-subfusoideae, saepius leniter naviculares, utrinque acutiusculae, 3-septatae, ad septa non v. vix constrictae, obscure fuligineae, 40-55 × 20-24.

Hab. in foliis vivis Xylosmatis Salzmanni (Flacourtiaceae), prope Carthago Costarica, America trop.

74. **Meliola rigida** Doidge, Trans. R. Soc. South Afr. V, 1917, p. 736 et 747, t. 64 fig. 36. — Amphigena, maculas atras usque ad 1 cm. diam. efficiens; hyphis rigidis, 7-8 μ crassis, brunneis, cellulis 18-25 μ longis, ramis plerumque oppositis; hyphopodiis capitatis numerosis, oppositis breviter stipitatis 14-18 μ long., cellula superiore ovata globulosa, 10-12 × 8-10; hyphopodiis mucronatis non numerosis, pallidioribus, oppositis circa 18 μ long., setis mycelicis erectis, simplicibus, plus minusve sinuosis, atris, opacis, 250-600 × 10-11; peritheciis sparsis, atris, globulosis, verrucosis, 180-220 μ diam.; ascis ovatis, breviter stipitatis, 3-sporis; sporidiis 4-septatis, leniter constrictis, oblongis, compressis, utrinque rotundatis, 40-45 × 18-20. 4416

Hab. in foliis Xymalos monosporae (Flacourtiaceae), Woodbush, Zoutpansberg Dist., Africa austr. (E. M. Doidge).

75. **Meliola Othophorae** H. S. Yates, F. from Brit. N. Borneo, in Philipp. Journ. of Sc. Bot., v. 13., 1918, p. 235. — Maculis epiphyllis, atris, orbicularibus vel suborbicularibus, 2-5 mm. diam.; mycelio copioso, ex hyphis rectis vel tortuosis brunneis 7-8 μ crassis, ramosis composito; ramis plerumque alternantibus; hyphopodiis capitatis numerosis, cellula superiore oblonga vel subinde lobata, 10-12 × 6-10, cellula inferiore 5-6 μ longa; hyphopodiis mucronatis paucissimis, ampulliformibus, usque ad 15 μ longis, setis mycelicis erectis, rectis, obscure brunneis, 350-450 × 7-8 cr. acutis; peritheciis numerosis, globosis, atris, opacis, 150-200 μ diametro; ascis ovoideis, 30-35 × 18-20, bisporis; sporidiis 4-septatis, ad septa constrictis, cylindraceis, utrinque obtusis, brunneis, 30-32 × 8-12. 4417

Hab. in foliis Othophorae fruticosae (Gentianaceae), Sapong, in ins. Borneo bor.

76. **Meliola Gesneriae** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 515. — Coloniis hypophyllis, circularibus, 2-8 μ diam.; mycelio atro, dense reticulato, 7 μ diam., ramis plerumque oppositis; hyphopodiis capitatis alternis, haud crebris, uno pro cellula, cellulis 24 μ circ. longis, cellula capitata ovato-globosa, 10 × 14, basilari 4-7 μ longa; hyphopodiis mucronatis alternis vel oppositis, phialiformibus; setis perithecialibus nullis, mycelialibus rectis vel leniter curvis, 400 × 7, ubique fuscis, circa perithecia copiosioribus, apice acutis; peritheciis 110 μ diam., levibus; ascis cito diffluentibus; sporidiis 4-septatis, brunneis, lenissime constrictis, 41 × 17. 4418

Hab. in foliis Gesneriae albiflorae (Gesneriaceae) et Cestri sp. (Solanaceae), Porto Rico.

77. **Meliola Scevolae** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 551. — Hypophylla, plagulas minutas orbiculares 2-4 mm. latas tenues formans; mycelio radiante, ex hyphis omnino rectis fuligineis crassiuscule tunicatis 5-7 μ cr. composito; hyphopodiis alternantibus, 12-16 μ long., cellula superiore globosa v. subglobosa et 10 μ diam., inferiore minuta saepe brevissima; hyphopodiis mucronatis oppositis, ampulliformibus, usque 22 μ long.; setis mycelicis parcis, rectis, fuligineis, tota longitudine pellucidis, crassiuscule tunicatis, remote septatis, apice obtusis, 250-375 × 5-7; peritheciis parcis, globosis, grosse verrucosis, atris, 120-150 μ diam.; ascis ovatis, bisporis; sporidiis cylindraceis, utrinque obtusis, 4-septatis, parum constrictis, fuligineis, 35-38 × 13-15. 4419

Hab. in foliis Scaevolae frutescentis (Goodeniaceae), Bales prov. Tayabas Luzon, Ins. Philippin. (L. Escritor).

78. **Meliola heterotricha** Syd. in Leaflets of Philipp. Bot. VI (1913), p. 1923. — Mycelio hypophyllo, maculiformi, plagulas atras valde conspicuas, 1-3 cm. diam. efformante, ex hyphis ramosis anastomosantibus, saepe longitudinaliter connatis, atro-brunneis, opacis, 6-8 μ latis composito; hyphopodiis mucronatis paucis, oppositis vel alternis, 18-26 μ longis; hyphopodiis capitatis numerosis, alternantibus, bicellularibus, rectis vel curvatis, 18-22 × 7-9, cellula basali brevi; setis mycelicis numerosis, erectis, rectis, rigidis, opacis, 200-375 × 6-8, septatis, biformibus: aliis simplicibus, apice obtusis, aliis apice 2-3-furcatis, dentibus mox exiguis mox elongatis et 8-12 μ longis; peritheciis aequaliter distributis, globosis, 160-200 μ diam., rugulosis; ascis ovatis, bisporis, fugacibus; spo 4420

ridiis oblongis, utrinque obtusis, 4-septatis, ad septa constrictis, fuscis, 36-44 × 10-12.

Hab. in foliis Donacis cannaeformis (Graminaceae), Cabadbaran, Mindanao, ins. Philipp. — Ob setas difformes *M. Mangiferae* Earle proxima, sed setis minoribus, hyphis angustioribus et sporidiis angustioribus et constrictis diversa.

79. **Meliola Imperatae** Syd., Ann. Mycol. 15., 1917, p. 186. — Amphi- 4421
gena, plagulas minutas elongatas 2-5 mm. longas atras formans; mycelium ex hyphis rectangulariter denseque ramosis obscure brunneis 6-9 μ crassis septatis flexuoso-undulatis vel rectiusculis compositum; hyphopodia capitata copiosa, alternantia, tota 22-25 μ longa, cellula basali cylindracea brevi vel longiore 5-10 μ longa, cellula superiore ovata aut saepius leniter angulata vel parum lobata 14-17 μ lata; hyphopodia altera (vix mucronata dicenda) opposita vel solitaria, rara continua, cylindracea, obtusa, 12-15 μ longa, 7-9 μ lata; setae mycelicae haud numerosae, rectae, 250-400 μ longae, 9-11 μ crassae, tota longitudine atrae opacae, ad apicem dentibus irregularibus plus minus erectis 2-6 sive brevibus sive longioribus (tunc usque 15 μ longis) plerumque obtusis praeditae; perithecia sparsa vel laxe gregaria, 150-180 μ diam.; asci 2-3-spori, diffluentes; sporae cylindraceae, utrinque rotundatae, 4-septatae, leniter constrictae, fuscae, 35-42 × 12-14.

Hab. in foliis Imperatae cylindricae (Graminaceae), Rizal et San Antonio, Luzon Ins. Philipp. (M. Ramos).

80. **Meliola panicicola** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 552.— 4422
Amphigena, plagulas minutas v. mediocres plus minus determinatas tenues formans; mycelio radiante, ex hyphis fuscis ramosis, 5-7 μ crassis composito; hyphopodiis capitatis numerosis, alternantibus, 17-22 × 10-13, loculo superiore angulato-globuloso v. truncato sed haud lobato; hyphopodiis mucronatis rarioribus, oppositis; setis mycelicis numerosis, rectis, rigidis, apice obtusis, superne pellucidis, inferne minus pellucidis v. opacis, remote septatis, crasse tunicatis, 400-550 μ long. 9-12 μ latis; peritheciis sparsis, globosis verrucosis, astomis, 110-150 μ diam.; ascis ovatis, bisporis; sporidiis cylindraceis, utrinque late rotundatis, griseo-fuscis, 4-septatis, non v. parum constrictis, 30-35 × 11-13.

Hab. in foliis Panici palmaefolii (Graminaceae), Mt. Isaroy Camarines, Ins. Philippin. (M. Ramos).

81. **Meliola substenospora** v. Höhn. — Syll. XXII p. 56. — fm. **Rott-** 4423
boelliae Rehm, Ascomyc. Philipp. V, Leaflets of Philipp. Botany,

VI (1914) p. 2193. — Absque diagnosi.

Hab. ad folia Rottboelliae exaltatae (Graminaceae), Los Baños, ins. Philipp. (S. A. Reyes et M. B. Raimundo).

82. **Meliola Sacchari** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 548.— 4424
Plagulas atras minutas 1-3 mm. longas saepe confluendo majores et subinde totam folii superficiem obtegentes formans; mycelio dense contexto ex hyphis crebre ramosis anastomosantibus obscure fuscis 8-10 μ cr.; hyphopodiis capitatis alternantibus sat numerosis, clavato-capitatis, 18-22 μ long., cellula basali brevi, superiore rotundata 13-15 μ lata; hyphopodiis mucronatis copiosis, oppositis, usque 18 μ long.; setis mycelicis erectis, rectis, 175-400 × 9-12, atris, opacis, ad apicem irregulariter in ramos 2-6 (saepius 4) plerumque brevissimos usque 10 μ tantum longos erectos rarius elongatos et tunc usque 30 μ longos divisis; ramulis iterum irregulariter denticulato-vel digitiformiter divisis; peritheciis sparsis, globosis, atris, 150-200 μ diam., ex cellulis 10-12 μ diam. contextis; ascis ovatis, plerumque 2-sporis, fugacibus; sporis 4-septatis, oblongis, utrinque late rotundatis, fuscis, 40-48 × 14-18, leniter constrictis, cellulis aequalibus.

Hab. in foliis Sacchari spontanei (Graminaceae), Ifugao, Luzon, Ins. Philippin. (R. C. Mc Gregor), Imperatae cylindricae, Mt. Maquiling prov. Laguna, Luzon (E. D. Merrill).

83. **Meliola Stenotaphri** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 4425
1916, p. 509, fig. 38. — Mycelio sinuoso vel zig-zag-undulato; hyphopodiis capitatis alternis, hinc inde unilateralibus, distincte pedicellatis, e cellula basilari 5-9 × 7, capitata, sphaerica vel ovata, circ. 20 × 14; hyphopodiis mucronatis paucis, oppositis vel alternis, ampulliformibus, 14 × 7; setis mycelialibus atris, opacis, 275 μ longis, basi 7 μ cr., apice simplicibus et acutis, rarissime bifidis; setis perithecialibus nullis; peritheciis minutis, 100 μ circ. diam., ob papillulas rotundatas scabris; sporidiis oblongis, 4-septatis, obtusis, leniter constrictis, 30-44 × 10-14.

Hab. in foliis Stenotaphri secundati (Graminaceae), Porto Rico. — Characteribus mycelii et hyphopodiorum facile dignoscenda.

84. **Meliola Calophylli** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 4426
1916, p. 490. — Coloniis utplurimum epiphyllis, irregularibus, diffusis, 1-10 mm. diam.; mycelio ex hyphis irregulariter ramosis, 7 μ diam., laxe reticulato-contextis constituto; hyphopodiis capitatis alternis vel irregularibus, non crebris, 35 μ circ. inter se di-

stantibus, cellula capitata ovoidea vel pyriformi, saepe angulosa et irregulari, 24 × 17, basilari 14 μ vel minus longa; hyphopodiis mucronatis irregulariter distributis, ampulliformibus, angustis, 20 μ circ. longis; setis mycelialibus nullis, perithecialibus copiosissimis, larviformibus, curvis, apice obtusis, pellucidis, 51 × 17; peritheciis 220 μ diam., regione ostiolari minuta; ascis mox evanidis; sporidiis 4-septatis, brunneis, valde constrictis, obtusis, 44-47 × 17.

Hab. in foliis Calophylli Calabae (Guttiferae), Mayaguez, Porto Rico. — Species appendicibus copiosissime larvaeformibus, transverse striatis et simulate septatis facile dignoscenda.

85. **Meliola Clusiae** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 520. — Coloniis hypophyllis, irregularibus, diffusis, 3-5 mm. diam., mycelio brunneo, 8 μ cr., subrecto, ramis utplurimum oppositis; hyphopodiis capitatis alternis, uno pro cellula, cellulis 30 μ circ. longis, cellula capitata ovoidea vel ellipsoidea, rarius cylindrica vel irregulari, 20 × 14, basilari 2-4 μ longa; hyphopodiis mucronatis sparsis, 20 × 7, phialiformibus; setis perithecialibus nullis, mycelialibus paucis, 800 × 10, ad basim, apice obtuso, fragili, saepius rupto, circa perithecia confertis; peritheciis simulate dimidiatis, areola hypharum radiantium tectis; sporidiis 4-septatis arcte constrictis, obtusis, cylindraceis, 61 × 20. 4427

Hab. in foliis Clusiae minoris (Guttiferae), El Alto de la Bandera, Porto Rico.

86. **Meliola mangostona** Sacc., Notae Mycol. XXIV p. 4 (Bull. Orto bot. Nap., 1918). — Coloniis epiphyllis, irregularibus, nigricantibus, saepe late confluentibus tenuiter velutinis; subiculi hyphis eximie reticulatis, brunneis; hyphopodiis ovato-oblongis apice rotundatis, bicellularibus, 20 × 9, rarius mucronatis 22 × 6-7; setis nullis visis; peritheciis globosis, prominulis, 180 μ diam. sublevibus, nigris; ascis ellipsoideo-oblongis, 4-sporis; sporidiis tereti-oblongis, utrinque rotundatis, constricto-4-septatis, 45-46 × 12-14, brunneis. 4428

Hab. in foliis Garciniae mangostanae (Guttiferae), in Horto bot. Singapore (Baker). — Species in foliis Garciniae Kydiae (ibidem) coloniis saturate nigricantibus, crebrioribus, amphigenis 4-5 mm. latis, setigeris est diversa species, pulcherrime denseque reticulata sed exemplaria nimis vetusta indeterminanda (*Mel. Kydia* ad interim).

87. **Meliola Garciniae** H. S. Yates, The Philipp. Journ. of Sc. Bot., 13., 1918, p. 369. — Maculas plerumque epiphyllas irregulares, 5-10 mm. diam. vel confluentes, atras, crustaceas efformans; mycelio 4429

ex hyphis castaneis 8-10 μ crassis formato; ramis plerumque oppositis; hyphopodiis capitatis numerosis, plerumque alternantibus, cellula superiore subglobosa vel ovata, 12-14 × 11-12, cellula inferiore 8-10 μ longa; hyphopodiis mucronatis numerosis, alternantibus vel oppositis, ampulliformibus, usque ad 25-30 μ longis; setis mycelicis numerosis, rectis, erectis, 11-13 μ crassis 700-1000 μ longis, atris, opacis, acutis vel obtusis; peritheciis paucis, globosis, atris, opacis 200-300 μ diam.; ascis non visis; sporidiis castaneis, cylindraceis, utrinque rotundatis, 4-septatis, ad septa vix constrictis, 50-55 × 18-20.

Hab. ad folia Garciniae sp. (Guttiferae), Burgos Prov. Llocos Norte, Luzon, Ins. Philipp. (Ramos).

88. **Meliola torta** Doidge, Trans. R. Soc. South. Afr. V, 1917, p. 726 et 744, t. 60 f. 16. — Amphigena, maculas atras tenues, 5-10 mm. diam. efficiens; hyphis tenuibus, 6-7 μ crassis, tortuosis, anastomosantibus, cellulis 25-36 μ long.; ramis irregularibus plerumque unilateralibus; hyphopodiis capitatis tenuibus, cellula superiore 14-25 × 14-20, diverse lobata, torta, apice obtusa v. convexa; hyphopodiis mucronatis, ampullaceis, 20-36 μ long.; setis mycelicis non numerosis, sparsis rectis, simplicibus, basi 10-11 μ cr., apice acutis; peritheciis paucis, sparsis, atris, globulosis, rugulosis, 160-250 μ diam.; ascis numerosis, 8-sporis; sporidiis distichis v. conglobatis, 3-septatis ad septa vix constrictis, clavatis, 25-30 × 7-11. 4430

Hab. in foliis Trichocladi criniti (Hamamelidaceae), Izeleni, Kingwilliamstown, Africa austr.

89. **Meliola Reinkingii** Sydow, Ann. Mycol. 18., 1920, p. 98. — Plagulae amphigenae, orbiculares, 2-4 mm. diam., subvelutinae, aterrimae; mycelium ex hyphis longis castaneo-brunneis 4-6 μ crassis subrectis vel parum undulatis copiose rectangulariter ramosis anastomosantibusque septatis compositum; hyphopodia capitata satis numerosa, alternantia, 20-25 μ longa, cellula inferiore longiuscula, superiore plerumque plus minus lobata rarius integra 8-12 μ lata; hyphopodia mucronata rariora; setae mycelicae modice copiosae, rectae, simplices, 250-300 μ longae, basi 6-10 μ crassae, tota longitudine opacae, ad apicem acutae; perithecia laxe gregaria, 100-120 μ diam., in sicco collapsa; asci fugaces; sporae cylindraceae, 3-septatae, obscure castaneo brunneae, constrictae, utrinque obtusae, 38-48 × 13-16. 4431

Hab. in foliis Hippocrateae spec. (Hippocrateaceae), Maria Cristina Falls, Lamao, Ins. Philippin. (O. H. Reinking).

90. **Meliola cavitensis** H. S. Yates, The Philipp. Journ. of Sc., Bot., 13., 1918, p. 366. — Epiphylla, plagulas orbiculares vel irregulares, 2 ad 6 mm. diam. tenues efformans; mycelio ex hyphis longis, rectis vel flexuosis 6-7 μ crassis septatis brunneis ramosis composito; articulis 20-25 μ longis; hyphopodiis capitatis numerosis, plerumque alternantibus, cellula superiore subglobosa vel ovata, 12 μ diam., cellula inferiore 5-6 μ longa; hyphopodiis mucronatis numerosis, oppositis vel alternantibus, ampulliformibus, usque ad 25 μ longis; setis mycelicis paucis, rectis vel curvatis, septatis, obscure brunneis, obtusis 300-400 μ longis, 8-10 μ latis; peritheciis numerosis, globosis, obscure brunneis, subopacis, 85-100 μ diam.; ascis clavatis, 35 μ longis, 8-10 μ latis, circiter 6-8-sporis; sporidiis cylindraceis, utrinque rotundatis, 4-septatis, ad septa constrictis, brunneis 30-35 × 10-12. 4432

Hab. ad folia Colei sp. (Labiatae), Talisay ridge, Prov. Cavite, Luzon, Ins. Philipp. (MERRILL).

91. **Meliola hyptidicola** Stev., Meliol. Porto Rico in Illin. Biolog. Monogr. II, 1916 p. 484, fig. 8. — Coloniis amphigenis, praecipue hypophyllis, irregularibus, diffusis; mycelio atro, reticulum laxum efformante, 7 μ diam., ramis irregularibus; hyphopodiis capitatis minutis, alternis vel irregulariter dispositis, non crebris, uno pro cellula, cellulis 20 μ circ. longis; cellula capitata ovoidali 14-17 × 9, basali 3-6 μ longa; hyphopodiis mucronatis paucis, ampulliformibus; setis mycelialibus et perithecialibus nullis; peritheciis 100-140 μ, scabriusculis; ascis mox evanidis; sporidiis 4-septatis, brunneis, lenissime constrictis, obtusis, 31-34 × 10-13. 4433

Hab. in foliis Hyptidis spec. plur. (Labiate), Porto Rico. — Var. **wombalensis** Beeli, Bull. Jard. Bot. de l'Etat Bruxelles, v. 7., 1920, p. 95. — A typo differt peritheciis (140-200) et sporidiis majoribus (32-40 × 13-16). — *Hab.* in foliis Hyptidis sp., Wombali, Congo Africae trop. (VANDERHYST).

92. **Meliola pelliculosa** Syd., Enum. Philipp. Fungi II, in Philipp. Journ. of Sci. VIII (1913) p. 480. — Amphigena, foliorum superficiem pellicula plus minus continua aterrima facile separabili obducens; mycelio ex hyphis densissime intertextis, obscure fuscis, 7-9 μ cr., ramosis, septatis composito; hyphopodiis capitatis numerosissimis, breviter cylindraceis vel subclavatis, apice late rotundatis, 14-20 × 8-10, fuscis, cellula basali brevi; hyphopodiis mucronatis rarioribus, ampulliformibus, usque ad 21 μ longis; setis mycelicis rectis, rigidis, apice acutis, simplicibus, opacis, superne 4434

subinde plus minus dilutioribus, 150-320 × 7-9; perithecis sparsis, minutis, globosis, tuberculatis, 100-130 μ diam.; ascis bisporis, ovatis, 40-50 × 25-35; sporidiis oblongis, utrinque late rotundatis, 4-septatis, ad septa valde constrictis, obscure brunneis, 39-45 × 14-17.

Hab. in foliis vivis vel languidis Lumnitzeræ racemosæ (Labiatae), Luzon, prope Manila, ins. Philipp. — *M. gymnosporiae* Syd. affinis, quae vero setis omnino caret.

93. **Meliola Litseae** Syd., Ann. Mycol. 15., 1917, p. 187. — Syn. *Mel. Litseae* A. S. Yates, Philipp. Journ. of Sc. 12., 1917, p. 366, *Mel. Litseae* P. Weid. Graff, Mem. Torr. Bot. Cl. 17., 1918, p. 61. — Amphigena, plagulas primitus minutas orbicularis 2-4 mm. latas dein saepe confluentes et effusas tenues formans; mycelium ex hyphis 9-10 μ crassis obscure brunneis septatis ramosis compositum; hyphopodia capitata numerosa, alternantia, subcylindracea vel ovato-oblonga, 21-27 μ longa, cellula basali brevi vel mediocri, cellula superiore semper integra ovata vel ovato-oblonga et 10-13 μ lata; hyphopodia mucronata solitaria vel opposita, rara, usque 26 μ longa; setae myceliales modice copiosae, subrectae vel curvatae, 350-700 μ longae, 9-11 μ crassae, biformes; aliae in superiore parte pellucide brunneae plus minus late rotundatae obtusae et integrae, aliae tota longitudine opacae ad apicem dentes vel ramulos breves 2-4 usque 12 μ longos gerentes; perithecia sparsa globosa 160-180 μ diam.; in sicco collapsa; asci 2-3 spori; sporae oblongae, utrinque late rotundatae, castaneo-brunneae, 4-septatae, vix vel leniter constrictae, 40-45 × 18-20. 4435

Hab. in foliis Litseae Perrottetii, L. glutinosae (?) (Lauraceae), Los Baños, Calauan, Bataan, S. Antonio etc., Ins. Philipp. (Baker, Mc Gregor, Ramos). — *Mel. Litseae* Yates, et P. W. Graff, etiam ex Philippinis, verisimiliter eadem est ac *M. Litseae* Sydow quae anterior.

94. **Meliola Ocoteae** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 497. — Coloniis hypophyllis, irregularibus 5-10 mm. diam.; mycelio atro, 6 μ crasso, sinuoso, laxo, opposite vel alterne ramoso; hyphopodiis capitatis alternis vel unilateralibus, 50-80 μ inter se distantibus, cellula capitata ovoidea vel angulari, 20 × 14, basilari 10-14 μ longa; hyphopodiis mucronatis paucis, ampulliformibus; setis mycelialibus nullis, perithecialibus copiosis, rectis vel leniter curvis, rigidis, fuscis, apice obtusis, 85 μ circ. longis; perithecis 170 μ diam., atris; ascis evanidis; sporidiis 4-septatis, fuscis, constrictis, utrinque paullo attenuatis, 50 × 14. 4436

Hab. in foliis Ocoteae leucoxyli (Lauraceae), Jajome Alto, Porto Rico. — *M. Mollerianae* similis sed characteribus mycelii et setarum perithecii distincta. Status conidicus saepe copiosus.

95. **Meliola ocoteicola** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 513, fig. 43. — Coloniis amphigenis, irregularibus, 3-10 mm. diam., confluentibus; mycelio laxiuscule reticulato-contexto, ramis plerumque oppositis, 7 μ crasso; hyphopodiis capitatis alternis, haud crebris, 30 μ circ. inter se distantibus, cylindraceis, cellula capitata basilari vix crassiore, apice obtusa, cellula basilari brevissima; hyphopodiis mucronatis paucis, sparsis, plerumque oppositis, conoideo-ampulliformibus, 20 × 6; setis perithecialibus nullis, mycelialibus paucis, rectis curvulisve, 300-350 μ longis, fuscis, apice acutis; perithecis 150 μ diam., non ostiolatis; ascis cito diffluentibus; sporidiis 4-septatis, brunneis, valde constrictis utrinque obtusis, 40 × 17. 4437

Hab. in foliis Ocoteae leucoxyli (Lauraceae), Mayaguez et Monte Alegrillo, nec non in foliis Chrysophylli sp. (Sapotaceae), Monte Alegrillo, Porto Rico.

96. **Meliola acutiseta** Syd., in Leaflets of Philipp. Bot. VI (1913) p. 1921. — Mycelio hypophyllo plagulas circulares 3-10 mm. latas, atras efformante, ex hyphis longiusculis, parce ramosis, obscure brunneis, 5-6,5 μ crassis composito; hyphopodiis mucronatis raris, plerumque oppositis, 15-20 μ longis; hyphopodiis capitatis variabilibus, bicellularibus, rectis vel leniter curvatis, saepe leniter lobatis aut angulatis, 15-20 × 6-10; setis mycelicis numerosis, simplicibus, rectis, erectis, apice acutis, opacis, 275-400 × 7-9, perithecis sparsis, globosis, in sicco non vel vix collapsis, aterrimis, leniter rugulosis, 150-180 μ diam.; ascis ovatis, 2-3-sporis, 40-55 × 18-28; sporidiis oblongis, 4-septatis, ad septa leniter constrictis, utrinque rotundatis vel uno fine saepe leniter attenuatis, brunneis, 35-40 × 11,5-13. 4438

Hab. in foliis vetustis Perseae piriformis (Lauraceae), Cabadbaran, Mindanao, ins. Philipp. — Affinis *M. laevigatae* Syd. cui habitu similis sed characteribus hyphopodiorum, setularum et sporidiorum distincta.

97. **Meliola Perseae** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 485 fig. 10. — Coloniis hypophyllis, irregularibus, atris, 2-5 mm. diam.; mycelio valde contorto, sinuoso, irregulariter, opposite, alterne vel dichotome ramoso, intense atro, 9 μ crasso; hy- 4439

phopodiis capitatis alternis vel irregularibus, cellula capitata ovato-piriformi, cuneiformi vel angulosa; hyphopodiis mucronatis alternis, variabilibus; setis mycelialibus et perithecialibus nullis; peritheciis 100-200 μ diam., atris, ob papillas late conoideas scabris; ascis evanidis; sporidiis 4-septatis, valde constrictis, atro brunneis, utrinque rotundatis, 44 × 24.

Hab. in foliis Perseae gratissimae (Lauraceae), Las Marias, Porto Rico. — Mycelio valde irregulari et setularum defectu praecipue distincta; *M. calvae* proxima, a qua tamen peritheciis scabris recedit.

98. **Meliola indica** Syd. in Syd. et Butl., Ann. Mycol. IX, 1911, p. 382.— 4440
Amphigena velutina; mycelio maculas atras orbiculares 2-6 mm. latas formante; hyphis fuscis, 6-8 μ cr.; hyphopodiis numerosis et dense stipatis, capitatis oppositis v. alternantibus, usque 14 μ long. et 11 μ latis, mucronatis oppositis et usque 18 μ long.; setis mycelii numerosis, simplicibus, rigidis, remote septatis, acutis, 250-400 μ long. 9-12 μ crassis; peritheciis globosis, atris, verruculosis, 170-210 μ diam.; ascis fugacibus, 2-4 sporis; sporidiis 4-septatis, constrictis, utrinque rotundatis, fuscis, 45-50 × 14-18.

Hab. in foliis Barringtoniae acutangulae (Lecythidaceae), Dacca, Indiae or. (A. Som). — *M. amphitrichae* affinis, sed hyphopodiis diversa.

99. **Meliola Barringtoniae** H. S. Yates, Philipp. Journ. Sc. Manila XII 4441
(1917), p. 363. — Epiphylla, maculas orbiculares 2-4 mm. diam., saepe confluentes, atras; mycelio ex hyphis paucis flexuosis radiantibus irregulariter ramosis brunneis septatis 10 μ latis composito; hyphopodiis capitatis numerosis, plerumque oppositis, vel alternantibus, cellula superiore globosa 12-14 μ lata; cellula inferiore 5 μ longa; hyphopodiis mucronatis paucis, ampulliformibus, usque ad 20 μ longis, 12 μ latis; setis mycelicis numerosis, atris, opacis, validis, 200-300 × 12-18, erectis, rectis vel leniter curvatis, acutis; peritheciis globosis, atris, opacis, tuberculatis, 140-200 μ diam.; ascis ellipsoideis, 4-sporis, evanescentibus, 50-60 × 18-22; sporidiis cylindraceis, utrinque late rotundatis, 4-septatis, ad septa constrictis, brunneis, 40-50 × 14-18.

Hab. in foliis Barringtoniae luzonensis (Lecythidaceae), Cavite Prov. Luzon, ins. Philipp. (Ramos et Deroy).

100. **Meliola Andirae** Earle — Syll. XXII p. 46 — var. **Puttemansii** G. 4442
Arnaud, Ann. Ecole Nat. Agricult. Montpellier, t. 16., 1918, p. 229, tab. 51 (ad int., sine diagn.).

Hab. in foliis Andiraae sp. (Leguminosae), San Paulo, Mattos da Serra da Cantareira, Brasilia (PUTTEMANS, in Putt. Fungi S. Paulens. 234).

101. **Meliola Bauhiniae** H. S. Yates, The Philipp. Journ. of Sc., Bot. 13., 1918, p. 365. — Hypophylla, plagulas atras, velutinas, orbiculares, 3-6 mm. diam. efformans; mycelio ex hyphis intertextis ramosis anastomosantibus castaneo-brunneis 4-5 μ crassis formato; hyphopodiis capitatis numerosis, alternantibus, vel unilateralibus, cellula superiore subglobosa, 12-13 μ diam., cellula inferiore 5-8 μ longa; hyphopodiis mucronatis paucis, usque ad 20-25 μ longis; setis mycelicis numerosissimis, rectis, erectis, simplicibus, ad apicem subacutis, atris, tota longitudine opacis, 200-250 μ longis, 8 μ cr.; peritheciis sparsis, 170-200 μ diam., globosis, tuberculatis, atris, opacis, astomis; ascis bisporis, ellipsoideis, 40-45 × 20-25; sporidiis cylindraceis, 4-septatis, ad septa constrictis, utrinque late rotundatis, brunneis, 40 × 12/15. 4443

Hab. ad folia Bauhiniae sp. (Leguminosae), Llocos Norte Prov., Luzon, Ins. Philipp. (ROMANOS).

102. **Meliola cylindrophora** Rehm, Ascom. Philippin. I in Philipp. Journ. of Sc. VIII, 1913, p. 181 et ap. Sydow, Enum. Philipp. Fungi II, in l. c. p. 480. — Mycelio epiphyllo, rarius hypophyllo, maculas minutas 1-4 mm. latas aegre conspicuas formante, laxo, radiante, ex hyphis longiusculis, rectis, ramosis, fuscis, 7-8 μ latis, septatis composito; hyphopodiis capitatis numerosissimis, plerumque perfecte oppositis, cylindraceis, fere semper rectis et aequalibus, apice late rotundatis, 11-16 × 8-9, bicellularibus, cellula basali brevissima subinde vix conspicua; hyphopodiis mucronatis rarioribus usque ad 21 μ longis; setis mycelicis paucis, erectis, rectis, ad basim geniculatis, simplicibus, septatis, inferne subopacis, apice dilutioribus et acutiusculis, 150-340 × 7-8; peritheciis paucis vel solitariis in quaque macula, globosis, late umbilicatis, 120-170 μ diam.; ascis plerumque bisporis, ovatis; sporidiis oblongis, utrinque late rotundatis, 4-septatis, ad septa constrictis, 36-40 × 15-17, fuscis. 4444

Hab. in foliis vivis Caesalpiniae nugae (Leguminosae), Luzon, ins. Philipp. (MERRILL).

103. **Meliola crenatissima** Syd., Ann. Mycol. 14., 1916, p. 77, fig. 2.— Epiphylla, plagulas orbiculares minutas 2-4 mm. diam. griseolas tenues formans; mycelio radiante, dense adpresso, ex hyphis plus minus distincte rectangulariter ramosis fuscis 7-8 μ crassis composito; hyphopodiis capitatis numerosis, plerumque alternantibus, 4445

18-26 μ longis, cellula superiore globosa usque ovata 11-14 μ lata, inferiore brevi; hyphopodiis mucronatis non visis, setis mycelicis sat numerosis, erectis, rectis, dilute brunneis usque castaneo-brunneis sed tota longitudine pellucidis, 250-330 × 7-10, apicem versus valde crenatis, (denticulis brevissimis usque longioribus et tunc 3-5 μ longis semper obtusis); peritheciis paucis in quaque plagula, globosis, astomis, 130-150 μ diam.; ascis 2-3 sporis; sporidiis cylindraceis, utrinque obtusis, 4-septatis, parum constrictis, sordide brunneis, 32-40 × 10-14.

Hab. in foliis Calopogonii caerulei (Leguminosae), Seringal Auristella, Rio Acre, Peruviae (E. Ule).

104. **Meliola aethiops** Sacc., Notae Mycol. XXIV p. 3 (Bull. Orto bot. Nap., 1918). — Coloniis epiphyllis, gregariis, subcircularibus, 2-3 mm. latis, interdum confluentibus, nigris, velutinis; mycelio radianti, fuligineo ramoso, hyphopodiis ovatis, conformibus, bilocularibus, 12-15 × 8, praedito, setulisque filiformibus, simplicibus, obtusulis, septatis, fuligineis, 170 × 7, interspersis; peritheciis globulosis, astomis, colliculosis, nigris, 145 μ diam.; ascis ovoideis, plerumque 2-sporis; sporidiis oblongis, constricto-4-septatis, 32 × 12, fuligineis. 4446

Hab. in foliis vivis Cassiae Fistulae (Leguminosae), in Horto bot. Singapore (Baker). — Pulchella species in planta medicinali, tam obvia, nondum indicata.

105. **Meliola toruloidea** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 493, fig. 21. — Coloniis amphigenis, in hypophyllo magis copiosis, circularibus, 1-4 mm. diam.; mycelio atro densiuscule reticulato, ramis oppositis vel alternis 7 μ diam., leniter undulatis; hyphopodiis capitatis alternis, non crebris, uno pro cellula, cellulis 20 μ circ. longis; cellula capitata piriformi 20 × 14, basilari brevissima, 5-6 μ; hyphop. mucronatis oppositis, phialiformibus; setis mycelialibus nullis, perithecialibus paucis vel copiosis, saepe 30-40, sparsis, valde uncinatis vel spiraliter incurvis, 70 × 7-8, atris; peritheciis juvenilibus non radiatis, 170 μ diam., ob papillulas rotundatas leniter scabris; ascis mox evanidis; sporidiis 4-septatis, brunneolis, constrictis, obtusis, 34 × 16. 4447

Hab. in foliis Cassiae et Ingae (Leguminosae), Porto Rico.

106. **Meliola chamaecristicola** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 494, fig. 24. — Coloniis epiphyllis, circularibus, 1-2 mm. diam., mycelio atro, sat dense reticulato, 7 μ crasso; hyphopodiis capitatis gracilibus, alternis, non crebris, 1 pro cellula, 4448

cellulis circ. 14-17 μ longis, cellula capitata ovoidea 14 × 10, basilari 3 μ longa; hyphopodiis mucronatis alternis vel oppositis, ampulliformibus, 14-16 × 6; setis mycelialibus nullis, perithecialibus paucis, rectis vel leniter curvatis, 80 × 4, apice obtusis, ubique fuscis; peritheciis 170 μ diam., papillis rotundatis scabris; ascis mox evanidis; sporidiis 4-septatis, brunneis, leniter constrictis, obtusis, 34 × 14.

Hab. in foliis Chamaecristae granulatae (Leguminosae), Mona Island, Porto Rico. — A caeteris speciebus proximis differt setis valde gracilibus.

107. **Meliola abrupta** Syd., Ann. Mycol. 15., 1917, p. 181.— Amphigena, 4449
saepe autem tantum hypophylla vel epiphylla, plagulas tenues arachnoideas minutas vel confluendo majores (usque 1 cm. diam.) saepe irregulares formans; mycelium ex hyphis 6-8 μ crassis rectangulariter ramosis fuscis septatis compositum; hyphopodia capitata numerosa, opposita vel alternantia, 13-20 μ longa, cellula superiore ovata, subglobosa vel piriformi 9-11 μ lata, inferiore minuta; hyphopodia mucronata etiam numerosa, opposita vel alternantia, pallidiora, inferne globulosa et ventricosa, superne abrupte in collum longum angustum cylindraceum producta, 20-24 μ longa, inferne 8-9 μ lata; setae mycelicae modice copiosae, simplices, rectae, plerumque tota longitudine opacae, ad apicem acutae, 200-400 μ longae, ad basim 9-11 μ latae; perithecia laxe aggregata, globosa, in sicco collapsa, 110-160 μ diam., levia; ascis 2-3-sporis; sporae cylindraceae, utrimque rotundatae, 4-septatae, constrictae, fuscae, 35-42 × 10-13.

Hab. in foliis Derridis diadelphae et Derridis spec. (Leguminosae), prov. Rizal, Luzon, Ins. Philipp. (M. Ramos).

108. **Meliola Derridis** H. S. Yates, The Philipp. Journ. of Sc. Bot. 13., 4450
1918, p. 368. — Epiphylla, plagulas atras, orbiculares 3-5 mm. diam., vel confluentes et subinde totam folii superficiem obtegentes efformans; mycelio radiante, ex hyphis fuscis anastomosantibus 6-7 μ crassis composito; ramis plerumque oppositis; hyphopodiis capitatis numerosis, alternantibus, cellula superiore rotundata 10-12 μ diam., cellula inferiore 5 μ longa; hyphopodiis mucronatis numerosis, oppositis ampulliformibus, usque ad 20-25 μ longis; setis mycelicis numerosis, erectis, rectis vel curvatis, 300-400 μ longis, 7-8 μ latis, castaneo-brunneis, subopacis, apicibus obtusis; peritheciis paucis, globosis, atris, 125-150 μ diam.; ascis non visis; sporidiis 4-septatis, oblongis, utrimque rotundatis, obscure fuscis,

30-35 × 11-13, ad septa constrictis.

Hab. ad folia Derridis (Leguminosae), Burgos, Prov. Ilocos Norte, Luzon, Ins. Philipp. (Ramos). — Verisimiliter eadem est ac *Mel. abrupta*.

109. **Meliola bicornis** Wint. — Syll. IX p. 422. — var. **heterotricha** Spegaz., Rel. Mycol. trop. etc. in Bol. Ac. Nac. Cienc. Cordoba, t. 23, 1919, Extr. p. 87. — A typo differt subiculo hyphis obscurioribus apice tantum pellucidis, acutis, nonnullis tantum bidenticulatis; hyphopodiis plerumque alternis variabilibus, aliis globosis sessilibus v. pedicellatis, aliis expansis, apiculis ampullaeformibus; peritheciis globosis 129-180 μ diam. papillosulis, sporidiis 4-septatis, cylindraceis 34 × 10, loculis apicalibus subhemisphaericis. — *Hab.* in foliis Desmodii incani? (Leguminosae), prope Apiahy, America austr. (J. Puiggari). — Var. **Calopogonii** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 532. — A typo differt setis rigidioribus, uniformiter minute denticulatis, nec non hyphopodiis capitatis paullo latioribus. — *Hab.* in foliis Calopogonii orthocarpi (Leguminosae), Mayaguez et Aguada, Porto Rico. Var. **Galactiae** Stev., loc. cit. p. 533. — Hyphopodiis capitatis latis, plerumque etiam setis divisis a typo satis differt. — *Hab.* in foliis Galactiae dubiae (Leguminosae), Rio Tanama, Porto Rico. Var. **Milletiae** Beeli, Bull. Jard. Bot. Etat Bruxelles, v. 7., 1920, p. 94. — A tipo recedit setis mycelicis pallidis non opacis, ad apicem verrucosis v. 2-3-dentatis, 350-540 × 7-9. — *Hab.* in pagina superiore foliorum Millettiae sp. (Leguminosae), in valle Mobi Lukunga, Congo Africae trop. (Vanderyst). 4451

110. **Meliola heterocephala** Syd., Ann. Mycol. 14., 1916, p. 356, fig. . — Epiphylla, plagulas minutas 1-3 mm. diam. tenues arachnoideas formans; mycelio plerumque parco, ex hyphis fuscis 5-8 μ crassis breviter ramosis anastomosantibus formato; hyphopodiis capitatis sat numerosis, alternantibus 12-20 μ longis, cellula superiore semper rotundata integra subglobosa vel ovata, 9-12 μ lata, inferiore brevi; hyphopodiis mucronatis rarioribus, oppositis; setis tantum ad basim paritheciorum evolutis, modice numerosis, 150-300 μ longis, 8-9 μ latis, ad apicem plerumque dilatatis (usque 12 μ), obscure brunneis, subopacis vel sursum subinde subpellucidis, ad apicem plerumque irregulariter incurvo-uncinatis et denticulos plus minus numerosos variae longitudinis gerentibus; peritheciis paucis in quaque plagula, globosis, in sicco collapsis, 120-160 μ diam., vix vel leniter tuberculatis, astomis; ascis 2-3-sporis, fugacibus, 35-40 4452

× 18-24; sporidiis cylindraceis, sordide brunneis, 4-septatis non vel leniter constrictis, utrinque rotundatis, 26-34 × 9-11, cellulis aequalibus.

Hab. in foliis Desmodii sp. (Leguminosae), M. Maquiling, ins. Philipp. (C. F. Baker).

111. **Meliola Zollingeri** Gail. — Syll. XI, p. 268 — var. **minor** Beeli, Bull. Jard. Bot. État Bruxelles v. 7., 1920, p. 100. — A typo differt: maculis non velutinis, peritheciis minoribus, 150-160, setis mycelicis plerumque 2-4 furcatis, leniter torulosis minoribus 220-250 × 6-7; hyphopodiis capitatis alternis, 14 × 12; sporidiis minoribus 36-39 × 10-12. 4453

Hab. in foliis Desmodii sp. (Leguminosae), Kikwit, Bokala, Congo, Africae trop. (Vanderyst).

112. **Meliola desmodiicola** Beeli, Bull. Jard. Bot. État Bruxelles, v. 7., 1920, p. 94. — Epiphylla; maculas atras irregulares, crustaceas 1-3 mm. diam. efformans, hyphis fuscis plus v. minus sinuosis, densis, 30-40 × 8; hyphopodiis capitatis oppositis v. unilateralibus, cellula apicali subglobosa 10-12 μ, cell. bas. brevi 4-6 × 8; hyphop. mucronatis numerosis subopppositis; peritheciis verruculosis, fusco-atris, subostiolatis 150-200 μ; setis mycelicis sparsis, paucis, brunneis pellucidis, septatis, simplicibus, rectis, apice obtusis et leniter inflatis 280-300 × 7; ascis evanescentibus; sporidiis 4-septatis, obtusis, ad septa constrictulis, cylindraceis, rectis curvulisve 37-40 × 10-13. 4454

Hab. in pag. sup. foliorum Desmodii sp. (Leguminosae), Wombali, Congo, Africae trop. (Vanderyst).

113. **Meliola Erythrinae** Syd., Ann. Mycol. 15., 1917, p. 185.— Epiphylla; plagulas primitus minutas 2-3 mm. diam. tenues dein plus minus confluentes effusas et saepe totum folium occupantes formans; mycelium laxum, ex hyphis longiusculis pellucide brunneis 7-9 μ latis septatis (articulis 25-40 μ longis) laxe ramosis subrectis vel flexuosis compositum; hyphopodia capitata numerosa, alternantia piriformia, integra, 17-22 μ longa, cellula superiore ovata vel globulosa 12-14 μ lata, inferiore brevi, hyphopodia mucronata opposita, usque 22 μ longa, basi 7-9 μ lata; setae mycelicae paucae, rectae vel parum curvatae, simplices, apice obtusae, 300-500 μ longae, basi 9-10 μ latae, tota longitudine vel saltem in superiore parte pellucidae; perithecia laxe gregaria, globosa, 100-160 μ diam., astoma, ex cellulis 8-10 μ diam. composita, cellulis peripheric is multo majoribus conoidee vel papilliformiter elongatis usque 30 μ longis basi ca. 20-24 μ latis; asci 2-4-spori; sporae oblongae, utrinque rotun- 4455

datae, 4-septatae, leniter constrictae brunneae, 35-42 × 11-15.

Hab. in foliis Erythrinae indicae (Leguminosae), Laguna, Luzon, Ins. Philipp. (M. Ramos).

114. **Meliola Gleditschiae** Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires, XXIII p. 41 (1912). — Caespitulis amphigenis, primo discretis, 1-3 mm. diam., dein confluentibus et saepe totum folium obtegentibus, parce setulosis, facile deciduis; hyphis repentibus densiuscule intertextis, sat flexuosis, obscure fuligineis, 10 μ cr.; hyphopodiis densiusculis, antrorsis, non adpressis, saepius clavulatis alternisque, bicellularibus, 30 × 12-15, raro lageniformibus et oppositis, semper fuligineo-pellucidis; setulis praecipue circa perithecia evolutis, erectis, 200-300 × 10-12, rectiusculis, apice obtusiusculis et saepe conidium cylindracco-fusoideum, 4-septatum, 30-35 × 6-7, fuligineum gerentibus; peritheciis subglobosis, 200-250 μ diam., coriacellis, glabris, non collabescentibus, astomis; ascis ellipsoideis, 65 × 35-40, bisporis, mox diffluentibus; sporidiis subcylindraceis, utrinque truncatis, 4-septatis, vix constrictis, e latere tenuiter compressis, 50 × 20-22 × 17-18, loculo centrali paullo majore, fuligineis. 4456

Hab. in foliis vivis Gleditschiae amorphoidis (Leguminosae), in silvis prope Puerto Lèon, Misiones: Argentina.

115. **Meliola Gliricidiae** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 550.— Epiphylla, plagulas parum perspicuas orbiculares 0,5-1 cm. diam. formans; mycelio radiante, fere rectangulariter ramoso, matrici adpresso, ex hyphis longiusculis fuscis 6-9 μ cr. composito; hyphopodiis capitatis numerosis, 15-18 μ long., cellula superiore globosa v. ovata 11-14 μ diam., basali brevissima, integris alternantibus v. unilateralibus; hyphopodiis mucronatis raris, oppositis; setis mycelicis modice numerosis, rigidis, erectis, simplicibus, apice acutis, tota longitudine opacis, 120-160 × 6-7; peritheciis sparsis, globosis, astomis, parum tuberculatis, 100-150 μ diam.; ascis 2-3-sporis; sporidiis cylindraceis, utrinque obtusis, 4-septatis, parum constrictis, fuscis, 32-36 × 12-14. 4457

Hab. in foliis Gliricidiae sepium (Leguminosae), prov. Rizal, Ins. Philippin. (M. Ramos).

116. **Meliola bataanensis** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 551. — Mycelio epiphyllo, tenui, subarachnoideo, plagulas parum distinctas 2-10 mm. diam., saepe confluentes et magnam folii partem occupantes formante; hyphis rectis, ramosis, remote septatis, fuscis, 7-8 μ latis; hyphopodiis capitatis alternantibus sat 4458

numerosis, rectis v. rarius apice leniter curvatis, crasse cylindraceis, bicellularibus, obtusis, 12-18 × 8-10, cellula basali brevi; hyphopodiis mucronatis oppositis, rarioribus; setis mycelicis rectis, erectis, apice acutissimis, opacis, 175-420 × 7-9; peritheciis dispersis, globulosis, 130-160 μ diam., verruculosis, contextu ex cellulis 8-10 μ diam., in sicco collapsis; ascis 2-4 sporis, ovatis; sporidiis oblongis, utrinque late rotundatis, 4-septatis, constrictis, fuscis, 35-38 × 12-14.

Hab. in foliis Millettiae sp. (Leguminosae), Lamao prov. Bataan Luzon, Ins. Philippin. (E. D. Merrill).

117. **Meliola Pterocarpiae** H. S. Yates, F. from Brit. N. Borneo, in Phy- 4459
lipp. Journ. of Sc. Bot., v. 13., 1918, p. 235. — Maculis epiphyllis, subpelliculosis, atris, orbicularibus vel suborbicularibus, 2 ad 6 mm. diametro, vel confluentibus et magnam partem folii occupantibus, mycelio tenuissimo, ex hyphis parce ramosis brunneis 6-8 μ crassis composito; ramis plerumque oppositis; hyphopodiis capitatis numerosis, alternantibus, cellula superiore ovata, 11-13 × 19-12, cellula inferiore 5 μ longa; hyphopodiis mucronatis paucissimis, ampulliformibus, usque ad 18 μ longis; setis mycelicis validis, rectis, erectis, atris, opacis, simplicibus, acutis, 200 × 10 12, peritheciis numerosis, globosis, atris, opacis, 125-140 μ diametro; ascis ovatis, bisporis, mox diffluentibus; sporidiis cylindraceis, utrinque late rotundatis, 4-septatis, ad septa constrictis, brunneis, 38-40 × 12-15.

Hab. in foliis Pterocarpi indici (Leguminosae), Tenom in ins. Borneo bor. — Socium *Phaeodothiopsis Pterocarpi* Yat.

118. **Meliola banosensis** Syd., Ann. Mycol. 14., 1916, p. 356. — Epiphylla 4460
vel petiolicola, plagulas primitus minutas dein confluentes et plus minusve effusas leniter velutinas atras formans; mycelio parco, effuso, ex hyphis fuscis 7-9 μ crassis ramosis septatis (articulis 10-25 μ longis) formato; hyphopodiis capitatis modice numerosis, alternantibus, bicellularibus, cellula superiore globulosa vel depresso-globosa integra 10-13 μ alta 10-15 μ lata, cellula inferiore usque 8 μ alta saepe brevissima vel subnulla; hyphopodiis mucronatis raris; setis mycelicis copiosis, rectis vel subrectis, 300-700 μ longis, basi 9-10 μ latis, ad apicem acutis, tota longitudine opacis, 2-4-septatis; peritheciis laxe gregariis globosis, 130-160 μ diam., atris, poro minuto pertusis, vix tuberculatis, in sicco profunde collapsis, contextu ex cellulis ca. 10 μ diam. composito; ascis ovatis, fugacibus, 40-60 × 22-28, 2-4-sporis; sporidiis cylindraceis, utrin-

que obtusis, rectis, 4-septatis, non vel vix constrictis, sordide brunneis, 32-86 × 10-15, loculis omnibus aequalibus.

Hab. in foliis Pueraria e sp. (Leguminosae), Los Baños, ins. Philipp. (C. F. Baker).

119. **Meliola Rudolphiae** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 511, fig. 41. — Mycelio semper epiphyllo, atro, undulato maculas circulares efformante vel irregulariter diffuso; setis mycelialibus copiosis, longis, 400 μ, atris, attenuatis, septatis, acutis, simplicibus; hyphopodiis capitatis alternis, cellula basilari brevi, 3-6 μ, capitata irregulari, plerumque lateraliter incurva, 10 × 17; hyphopodiis ampulliformibus alternis, 21 × 7; peritheciis numerosis, racemose acervatis, atris, 150-170 μ diam., depressiusculis, siccis collapsis, papillis brevibus scabris; ascis 4-sporis, 65 × 27; sporidiis 4-septatis, obscure brunneis, utrinque rotundatis, modice constrictis, 48-51 × 17-20. 4461

Hab. in foliis Rudolphiae volubilis (Leguminosae), Porto Rico. — *M. Montagnei* affinis; differt colore, sporidiis, mycelii exiguitate et densitate.

120. **Meliola Schizolobii** Syd., Ann. Mycol. 14., 1916, p. 76.— Epiphylla, plagulas minutas 3-6 mm. diam. tenues laxas griseolas formans, mycelio eximie radiante, matrici dense adpresso, rectangulariter ramoso, ex hyphis fuscis 6-7 μ crassis composito; hyphopodiis capitatis numerosis, in longa serie oppositis, singulis unilateralibus, 11-18 μ longis cellula superiore globulosa vel ovata 9-11 μ lata, inferiore minuta vel minutissima saepe vix visibili, integris; hyphopodiis mucronatis non visis; peritheciis sparsis, globosis, astomis, 80-100 μ diam.; setis mycelis sat numerosis, rectis vel fere rectis, rarius parum flexuosis, tota longitudine pellucidis, crasse tunicatis septatis, dilute fuscis usque fuscis, ad apicem saepe subhyalinis, apice obtusis vel breviter 2-4-furcatis (dentibus plerumque brevissimis 2-3 μ longis, rarius longioribus usque 10 μ); ascis non visis; sporidiis cylindraceis, utrinque obtusis, 4-septatis, leniter constrictis, 26-30 × 10-13. 4462

Hab. in foliis Schizolobii excelsi (Leguminosae), Seringal, S. Francisco, Rio Acre, Brasiliae (E. Ule).

121. **Meliola Tamarindi** P. et H. Syd., Ann. Mycol. X, 1912, p. 79.— Mycelio epiphyllo, subvelutino, atro, ex hyphis ramosis anastomosantibus dense intertextis 8-11 μ cr. brunneis formato; hyphopodiis alternantibus, stipitatis, bicellularibus, cum stipite 15-30 μ long. 10 μ cr.; setis mycelii simplicibus, erectis, rectis, obscure brunneis, 4463

usque 400 μ long. 7-10 μ cr.; peritheciis aggregatis, globosis, atris, tuberculatis, 175-250 μ diam., contextu ex cellulis 11-14 μ latis composito; ascis clavulatis 50-60 × 20, 2-3-sporis; sporidiis oblongis, 4-septatis, constrictis, utrinque rotundatis, obscure brunneis, 36-44 × 13-17.

Hab. in foliis Tamarindi indici (Leguminosae), pr. Manila, ins. Philippin. (E. D. Merrill).

122. **Meliola Teramni** (Sacc.) Syd., Ann. Mycol. 15., 1917, p. 193, *M. nigro-rufescens* var. *Teramni* Sacc. in Atti Accad. Ven. Trent. Istr. X, 1917, p. 60. — Epiphylla, plagulas minutas 1-3 mm. diam. subinde confluentes tenues formans; mycelium ex hyphis toruloso-flexuosis brunneis 7-8,5 μ crassis ramosis anastomosantibusque septatis compositum; hyphopodia capitata numerosa, alternantia vel opposita, plerumque ovata, 16-22 μ longa, cellula superiore ovata vel subglobosa semper integra saepe recurvata 12-15 μ lata, cellula inferiore brevissima; hyphopodia mucronata etiam copiosa, opposita, lageniformia, 18-24 μ longa, subito in collum longiusculum producta, basi 7-8 μ lata; setae myceliales modice copiosae, rectae vel subrectae, 500-750 μ longae, basi 9-11 μ crassae, inferne opacae, superne semper pellucide brunneae, ad apicem late obtusae vel truncatae sive simplices, sive dentes 2-4 brevissimos vel longiores (2-15 μ longos), erectos gerentes; perithecia laxe gregaria, globosa, astoma, 120-170 μ diam., glabra; asci ovati, 40-48 × 25-35, bi-trispori; sporae oblongo-cylindraceae, 4-septatae, vix vel leniter constrictae, brunneae, utrinque obtusae, 36-42 × 11-15, cellulis aequalibus. 4464

Hab. in foliis Teramni uncinati (Leguminosae), Los Baños, Laguna (C. F. Baker), T. labialis, Kalinga Luzon, Ins. Philipp. (H. S. Yates).

123. **Meliola Castanha** Theiss., Broteria, Bot., v. XII, 1914, fasc. I, p. 24. — Mycelio amoene radiato, plagulas 2-4 mm. latas circulares efformans. Hyphae 10-14 μ crassae, fuligineo-brunneae, asperulo-granulosae, typice (at inconstanter) opposite ramosae, septis 40 μ distantibus. Hyphopodia capitata alterna, elongato-clavata, pedicellata, recta (rarius recurvata), integra, 30-32 μ longa, supra 12-16 μ lata; hyphopodia mucronata latiora, ampulliformia, collo recurvo. Setae myceliales nigrae, rectae, basi non vel vix brevissime geniculatae, basi 10 μ crassae, usque 500 μ longae, apice laetiores acutiusculae integrae vel obsolete lateraliter denticulatae. Perithecia in centro plagarum dense gregaria, globulosa, grosse verru- 4465

cosa, atro-nitentia, 200-250 μ diam., astoma, glabra, cellulis polygoniis robustis 15-20 μ latis rubro-brunneis (extus polygonaliter prominentibus) contexta. Asci 2-3 spori, elliptici, 70-75 × 42. Sporae 4-septatae, semper laete olivaceae, guttulis destitutae, cylindraceae, 56-68 × 24-28, ad septa modice constrictae, cellulis aequalibus (extimis paulo majoribus).

Hab. epiphylla in foliis Leguminosae scandentis, vulgo « Castanha » dictae, S. Leopoldo, Brasiliae meridionalis.

124. **Meliola Smilacis** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 524. — Coloniis amphigenis sed in epiphyllo magis copiosis, irregulariter circularibus, 2-4 mm. diam., mycelio modice contexto, non undulato, opposite ramoso; hyphopodiis capitatis alternis, oppositis vel unilateralibus, cellula capitata cylindraceo-subglobosa, 14 × 11, basilari brevi, circ. 4 μ; hyphopodiis mucronatis raris, conoideis, collo breviter attenuato, vel ampulliformibus, collo magis elongato; setis mycelialibus copiosis 500 μ circ. altis, sursum attenuatis, basi 10 μ cr., apice obtusis, raro bifidis, pallidis, basi opacis; setis vel appendicibus perithecialibus nullis; peritheciis 200 μ circ. diam., ostiolo minutissimo praeditis; ascis mox evanidis, brevibus; sporidiis 4-septatis, leniter constrictis, utrinque obtusis, 15 × 17. 4466

Hab. in foliis Smilacis (Liliaceae), Porto Rico.

125. **Meliola Fagraeae** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 549.— Hypophylla, plagulas aterrimas velutinas orbiculares $^1/_2$-1 $^1/_2$ cm. diam. valde conspicuas formans; mycelio radiante, dense depresso, ex hyphis dense intertextis torulosis fuscis opacis 7-10 μ crassis composito; hyphopodiis capitatis numerosissimis, dense stipatis, ovato-oblongis, obtusis, bicellularibus, 18-26 × 10-12; setis mycelicis numerosis, erectis, rectis, lanceolatis, apice acutis, tota longitudine opacis, 300-400 μ long. 8-10 μ latis; peritheciis sparsis, astomis, globosis, 130-160 μ diam.; ascis ovatis bisporis; sporidiis cylindraceis, utrinque late rotundatis, 4-septatis, leniter constrictis, obscure castaneo-brunneis, subopacis, 40-50 × 16-21; mycelio conidiifero copiose evoluto Helminthosporii speciem sistente; hyphis fertilibus erectis, rectis v. parum flexuosis, laxe fasciculatis, plus minus toruloso contortis, 175-400 × 6-9, fuligineis, septatis (articulis 22-35 μ longis); conidiis acrogenis, fusoideis, 3-4 septatis, totis 34-48 μ long., medio 7-10 μ latis, utrinque (praecipue ad apicem) attenuatis, fuligineis. 4467

Hab. in foliis Fagraeae plumeriaefoliae (Logania-

ceae), Mt. Isarog prov. Camarines, Ins. Philippin. (M. Ramos).

126. **Meliola catubigensis** H. S. Yates, Philipp. Journ. Sc. Manila, XII (1917) p. 363. — Amphigena, plerumque epiphylla, maculas atras, orbiculares, 5-10 mm. diam. vel confluentes et folii superficiem plus minusve continue obtegente, mycelio ex hyphis brunneis septatis ramosis 8-10 μ crassis composito; hyphopodiis capitatis numerosis, alternantibus, cellula superiore globosa vel ovata, 12 μ diam., inferiore 5 μ longa; hyphopodiis mucronatis paucis, plerumque oppositis, ampulliformibus, usque ad 15 μ longis; setis mycelicis 250 μ longis, 8-10 μ latis, erectis, rectis vel leviter curvatis, inferne atris, opacis, apicem versus septatis, obscure brunneis, obtusis; peritheciis paucis, minutis, 60-80 μ diam., globosis obscure brunneis, subopacis, tuberculatis; ascis non visis; sporidiis 4-septatis, ad septa constrictis, cylindraceis, utrinque late rotundatis, brunneis, 30-34 μ longis 12-15 μ latis. 4468

Hab. in foliis Loranthi sp. (Loranthaceae), Catubing Riv. Ins. Philipp. (Ramos). — A *Mel. Loranthi* Gaill. diversa.

127. **Meliola arcuata** Doidge, Trans. R. Soc. South Afr. V p. 737 t. 66 fig. 37. — Coloniis minutis velutinis, 1-2 mm. diam.; hyphis ramoso-sinuosis, septatis, brunneis, 10-11 μ cr., demum anastomoticis; hyphopodiis capitatis, alternis, breviter stipitatis 20-30 × 10-11, cellula terminali ovoidea dentato-lobulata; hyphopodiis mucronatis parcis, oppositis, 14-18 × 7-9; setis mycelialibus numerosis, simplicibus, arcuatis rarius subrectis, nigris, opacis, apice acutis, 115-150 × 7-11; peritheciis nigris, granulosis, 115-150 μ diam.; ascis bisporis evanidis; sporidiis elliptico-oblongis, utrinque rotundatis, 4-septatis ad septa leniter constrictis, 50-54 × 14-16. 4469

Hab. ad caules Visci sp. (Loranthaceae), Kentami, Africae australis (Pegler).

128. **Meliola Magnoliae** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. 1916, p. 523, fig. 50.— Coloniis hypophyllis, irregularibus, 3-20 mm. diam., atris; mycelio 7 μ cr. laxe reticulato contexto; hyphopodiis capitatis alternis vel irregularibus, 45 μ circ. inter se distantibus, cellula capitata cylindracea, recta vel curvula, quam pedicello valde crassiore, obtusa, cellula basilari 8 μ circ. longa; hyphopodiis mucronatis oppositis vel sparsis, subcylindraceis vel anguste ampulliformibus, 20 μ longis; setis perithecialibus nullis, mycelialibus paucis, 700 μ circ. longis, rectis vel leniter curvis, opacis, apice acutis, simplicibus vel, raro, breviter furcatis; peritheciis 200 μ diam., leniter scabris, non ostiolatis; ascis cito diffluentibus; spo- 4470

ridiis 4-septatis, atro-brunneis, arcte constrictis, obtusis, 51 × 20,

Hab. in foliis Magnoliae portoricensis (Magnoliaceae), Monte Alegrillo, Porto Rico. — Ob hyphopodia haud perfecte evoluta, ramis mycelialibus brevibus subsimilia, species facile dignoscitur et primitiva in genere videtur.

129. **Meliola diplochaeta** Syd. in Leaflets of Philipp. Bot. V (1912) 4471
p. 1536. — Mycelio hypophyllo, plagulas aterrimas magnas discoideas 1-2 cm. latas velutinas efformante, ex hyphis fuscis laxiuscule ramosis 7-10 μ cr. composito; hyphopodiis mucronatis plerumque alternantibus, 24-28 μ longis; hyphopodiis capitatis clavatis, rectis vel curvulis, superne subinde irregulariter leniterque lobatis, 2-3-cellularibus, 20-35 × 10-15; setis mycelicis numerosissimis, praelongis, rectis vel subrectis, rigidulis, 1-1,75 mm. longis, 6-11 μ cr., prope basim abrupte geniculatis, opacis, apice 2-pluries inciso-furcatis vel denticulatis, dentibus plerumque brevissimis, raro haud furcatis; setis perithecialibus paucis, multo brevioribus, 250-500 μ tantum longis, etiam ad apicem furcatis; peritheciis in mycelio sparsis, globosis, in sicco collapsis, atris, 90-140 μ diam., rugulosis; ascis bisporis, ovatis, mox diffluentibus; sporidiis oblongis, utrinque rotundatis, 4-septatis, ad septa constrictis, obscure brunneis, 50-56 × 22-24.

Hab. in foliis vetustis Talaumae villarianae (Magnoliaceae), Puerto Princesa, Palawan, ins. Philipp. — Ob setas myceliales perlongas, peritheciales contra multo breviores species peculiaris.

130. **Meliola rectangularis** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. 4472
II, 1916, p. 495, fig. 25. — Coloniis epiphyllis, circularibus vel irregularibus, 1-10 mm. diam.; mycelio ex hyphis 7 μ diam., ramis oppositis typice rectangularibus praeditis, laxe contextis efformato; hyphopodiis capitatis alternis, circ. 25 μ inter se distantibus, cylindraceis vel ovoideis, cellula capitata 17 × 10, basilari 3-5 μ longa vix angustiore, hyphopodiis mucronatis alternis vel oppositis, e conoideis subampulliformibus, 20 × 6; rostro tenui; setis myceliallbus nullis, perithecialibus paucis, brevibus, 80 μ vel minus, opacis, apice obtusis, rectis vel leniter curvis; peritheciis 170 μ diam.; ascis mox evanidis; sporidiis 4-septatis, brunneis, leniter constrictis, obtusis, 38 × 14.

Hab. in foliis Banisteriae laurifoliae (Malpighiaceae) et Coccolobae laurifoliae (Polygonaceae), Porto Rico.

131. **Meliola Byrsonimae** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, p. 517. — Coloniis epiphyllis circularibus vel irregularibus, 2-5 mm. diam.; mycelio ex hyphis laxe reticulato-contextis, 10 μ diam. efformato; hyphopodiis capitatis alternis, usque ad 120 μ distantibus, cylindraceis, 20 × 17, saepe irregularibus vel curvis, cellula basilari 3-5 μ longa; hyphopodiis mucronatis oppositis, ampulliformibus, 24 μ circ. longis; setis perithecialibus nullis, mycelialibus parcissimis, sparsis, rectis vel leniter curvis, 1000 μ longis, ubique fuscis, apice obtusis vel acutis; perithecis 150-160 μ diam., levibus, in juventute areola myceliali cinctis; ascis mox evanidis; sporidiis 4-septatis, brunneis, leniter constrictis, obtusis, 54 × 18. 4473

Hab. in foliis Byrsonimae lucidae (Malpighiaceae), Guayanilla, Porto Rico. — *M. amphitrichae, ambiguae* et *corallinae* cognata sed distincta.

132. **Meliola crenato-furcata** Syd., Ann. Mycol. 14., 1916, p. 77. — Hypophylla, plagulas effusas irregulares tenues usque 2 cm. longas confluentes formans; mycelio radiante, dense adpresso, ex hyphis plus minus distincte rectangulariter ramosis fuscis 8-9 μ crassis composito; hyphopodiis capitatis numerosis, plerumque alternantibus, crasse cylindraceis, rectis vel curvatis, 18-24 μ longis, 10 μ latis, cellula basali minuta; setis mycelicis sat numerosis, erectis, rectis, obscure castaneo-brunneis, opacis, rarius superne subpellucidis, 300-350 × 8-10, apicem versus mox tantum crenatis, mox denticulatis vel potius 2-4 furcatis (dentibus usque 12 μ longis); perithecis sparsis, globosis, astomis, 150-180 μ diam.; ascis 2-3-sporis; sporidiis crasse cylindraceis, utrinque obtusis 4-septatis, constrictis, 35-40 × 13-17. 4474

Hab. in foliis Malpighiaceae, Seringal S. Francisco, Rio Acre, Brasiliae (E. Ule). — *M. crenatissimae* affinis.

133. **Meliola Triumfettae** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 498. — Coloniis epiphyllis, punctiformibus, 1-3 mm. diam.; mycelio ex hyphis sinuosis, irregulariter ramosis, 6 μ cr., dense reticulato-intertextis composito; hyphopodiis capitatis minutis, alternis vel irregulariter distributis, 17-50 μ circ. inter se distantibus, cellula capitata globuloso-piriformi, 14 μ diam., basilari brevi; hyphopodiis mucronatis paucis, sparsis, alternis vel oppositis, phialiformibus, circ. 20 × 7; setis mycelialibus nullis, perithecialibus paucis, 1-5, interdum sinuosis, 70-85 × 6, flavis, pellucidis, apice obtusis; perithecis irregulariter globosis, 85-140 μ diam., scabris, translucidis, papillulis conoideis conspersis; ascis mox evanidis; 4475

sporidiis 4-septatis, brunneis, constrictis, obtusis, 34-41 × 10-14.

Hab. in foliis Hibisci tiliacei (Malvaceae) nec non Triumfettae semitrilobae (Tiliaceae), Porto Rico. — Specimina in Hibisco, mycelio magis undulato et colonias latiores efformante, setis perithecialibus quoad numerum magis variabilibus, a typo paullo recedunt.—Var. **Vanderystii** Beeli, Bull. Jard. Bot. État Bruxelles, v. 7., 1920, p. 100. — A typo differt setis perithecii majoribus, 100 × 8-10, leniter torulosis, distincte uncinatis. *Hab.* in foliis Triumfettae sp. (Tiliaceae), Kikwit, Congo Africae trop. (VANDERYST).

134. **Meliola Sidae** Rehm, Ascomyc. Philipp. III, in Philipp. Journ. of Sci. VIII (1913) p. 391. — *M. microspora* Rehm, Ascomyc. Philipp. I, loc. cit. p. 181, non Pat. et Gaill. — Mycelio plagulas arachnoideas, orbiculares, tenuissimas, nigrescentes, discretas, 1-3 mm. latas, raro confluentes, epiphyllas, in hypophyllo interdum crustaceas formante; hyphis centrifugis, subramosis, fuscis, 6-7 μ cr., hyphopodiis capitatis plerumque alternantibus, 2-cellularibus, apice ovoideis, interdum truncatis vel sublobulatis, 12-15 × 10-12, hyphopodiis mucronatis plurimis oppositis, 15 × 6-9 obsessis; peritheciis sparsis, globulosis, astomis, atris, verruculosis, 120 μ latis, ad basim setis singulis erectis, apice acutatis, septatis, obscure fuscis, 200 × 7-8, aliis erectis apice obtusis et dilutioribus, septatis, 60-100 × 7-8 instructis; ascis ellipsoideis, 4-sporis, 30 × 15; sporidiis oblongis, utrinque rotundatis, 4-septatis, ad septa subconstrictis, flavo-fuscis, 25-27 × 9-10. 4476

Hab. ad folia Sidae javensis (Malvaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (BAKER). — A *M. microspora* Pat. et Gaill. differt setis peritheciorum biformibus.

135. **Meliola Marcgraviae** L. R. Tehon, Bot. Gazette 67., 1919, p. 506.— Coloniis epiphyllis, irregularibus 3-10 mm. diam., opposite ramosis, hyphis e obscuris opacis 5-6 μ diam.; hyphopodiis capitatis alternis, 32 μ inter se remotis, cellula apicali globosa 11 μ diam., basali brevi 5 μ longa; hyphopodiis mucronatis plerumque oppositis, sed frequenter etiam alternis, phyalaeformibus, 12-14 μ long., setis mycelicis et perithecialibus nullis; peritheciis sparsis, parvis, 65-75 μ diam.; ascis mox evanidis; sporidiis 4-septatis, pallide brunneis, cylindraceis, ad septa constrictulis, 40 × 15. 4477

Hab. in foliis Marcgraviae rectiflorae (Marcgraviaceae), Porto Rico.

136. **Meliola Memecyli** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 198; 4478

XV, 1917, p. 189. — Amphigena, plagulas primitus orbiculares 3-5 mm. diam. dein confluentes et irregulares atras leniter velutinas formans; mycelio obscure brunneo, ex hyphis densiuscule septatis 9-11 μ latis breviter ramosis composito; hyphopodiis capitatis sat numerosis, semper alternantibus, oblongis v. crasse cylindraceis, 20-28 μ long. 10-15 μ latis, cellula superiore rotundata, inferiore plerumque brevi; hyphopodiis mucronatis non visis; setis mycelicis numerosis, rigidis, rectis v. subrectis, atris, opacis, septatis, ad apicem quandoque 2-3 ramosis plerumque paullo dilutioribus, 600-1000 μ long. inferne 9-12 μ latis; peritheciis laxe gregariis, atris, rugosis, astomis, in sicco collapsis, 160-250 μ diam.; ascis ovatis, bisporis, 50-65 × 32-38; sporidiis ellipsoideis v. subcylindraceis, aut oblongis, utrinque rotundatis, 4-septatis et constrictis, obscure brunneis, 49-54 × 19-24.

Hab. in foliis Memecyli edulis (Melastomataceae), Dapoli Indiae or. (S. L. Ajrekar) et M. lanceolati in Ins. Philippinis (Ramos). — *Mel. amphitrichae* Fr. proxima, sed differt praecipue setulis mycelialibus multo longioribus.

137. **Meliola affinis** Syd. in Leaflets of Philipp. Bot. VI (1913) p. 1921. — 4479
Mycelio hypophyllo, vix maculiformi, subeffuso, laxo, ex hyphis ramosis anastomosantibus, atris, opacis, 8-11 μ latis composito; hyphopodiis mucronatis raris, oppositis vel alternantibus, 18-26 μ longis; hyphopodiis capitatis magis numerosis, alternis, rectis vel curvatis, bicellularibus, 22-30 × 8-11; setis mycelicis rectis, erectis, rigidis, opacis, 300-700 × 10-15, biformibus; aliis simplicibus apice obtusis, aliis apice 2-3-furcatis, dentibus usque ad 10 μ longis; peritheciis paucis, globosis, rugulosis, 180-230 μ diam.; ascis ovatis, bisporis; sporidiis oblongis, utrinque rotundatis, 4-septatis, ad septa constrictis, fuscis, 38-44 × 13-16.

Hab. in foliis vetustis Memecyli urdanetensis (Melastomataceae), Cabadbaran, Mt. Urdaneta, Mindanao, ins. Philipp.— *M. Mangiferae* Earle valde affinis; differt praecipue sporidiis minoribus et constrictis.

138. **Meliola Miconiae** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 4480
1916, p. 498, fig. 29. — Coloniis epiphyllis circularibus, 2-5 mm. diam., nitide limitatis atris, levibus; mycelio dense intertexto, ex hyphis 7 μ cr. plerumque opposite ramosis; hyphopodiis capitatis alternis vel irregularibus, haud crebris, 30 μ circ. inter se distantibus, cellula capitata piriformi, irregulari angulosaque, saepe curva, basilari 7-9 μ longa; hyphopodiis mucronatis non visis; setis my-

celialibus nullis, perithecialibus inconspicuis, paucis, 3-10, rectis vel leniter curvis, vel etiam convolutis, obtusis, 30-85 × 10; peritheciis 170-225 μ diam., tenuiter papillulato-scabris; ascis tetrasporis, cito diffluentibus; sporidiis 4 septatis, brunneis, leniter constrictis, obtusis, 44-47 × 17.

Hab. in foliis Miconiae prasinae (Melastomataceae), Las Piedras et Las Marias, Porto Rico.

139. **Meliola miconiicola** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 491, fig. 19. — Coloniis hypophyllis, irregularibus, diffusis, 5-20 mm. diam.; mycelio laxissime reticulato ex hyphis leniter undulatis, 6 μ diam., ramis plerumque oppositis praeditis constituto; hyphopodiis capitatis minutis, alternis vel irregulariter distributis, inter se valde distantibus, circ. 75 μ, cellula capitata ovoidea vel piriformi, interdum paullo irregulari, 17 × 14, basilari 4-10 μ longa; hyphopodiis mucronatis paucis, sparsis, plerumque oppositis, phialiformibus, angustis, curvulis, 17 μ circ. longis; setis mycelialibus nullis, perithecialibus paucis, 3-10, basilaribus, plus minusve curvatis, 30-85 × 7, apice obtusis, fuscis; peritheciis 135 μ diam., papillis rotundatis asperatis; ascis mox evanidis; sporidiis 4-septatis, brunneis, constrictis, obtusis, 35-38 × 11. 4481

Hab. in foliis Miconiae Sintenisii (Melastomataceae), El Alto de la Bandera, Porto Rico. — Mycelio sparso et hyphopodiis remotissimis distincta species.

140. **Meliola Aglaiae** Syd., Philipp. Journ. of Sc., v. 9., Sect. C., n. 2., 1914, p. 159. — Amphigena. plagulas orbiculares minutas 2-4 mm. latas tenuissimas atras formans; mycelio hyphis radiantibus laxiuscule ramosis septatis fuscis 6-8 μ crassis composito; hyphopodiis capitatis sat numerosis, solitariis v. saepius in longa serie perfecte oppositis bicellularibus, oblongis, 12-16 μ longis, 7-8,5 μ latis, cellula basali brevi vel brevissima, superiore late rotundata; hyphopodiis mucronatis rarioribus, usque 18 μ longis; setis mycelicis numerosis, subrectis vel lenissime falcato-curvatis, 350-700 μ longis, inferne 7-9 μ crassis ad apicem acutis, inferne opacis, superne dilutioribus et pellucidis, septatis; peritheciis paucis in quaque plagula, globosis, 120-150 μ diam., vix verrucosis; ascis 2-3-sporis; sporidiis oblongis, utrinque late rotundatis, non vel vix constrictis, fuscis, 34-38 μ longis, 14-17 μ latis. 4482

Hab. in foliis Aglaiae sp. (Meliaceae), Palawan, Taytay, Ins. Philipp. (Merrill).

141. **Meliola Amoorae** H. S. Yates, The Philipp. Journ. of Sc., Bot., 4483

13., 1918, p. 364. — Maculae epiphyllae, atrae subpelliculosae irregulares et magnam partem folii occupantes; mycelio abundante, ex hyphis laevibus brunneis radiantibus 7-8 μ cr. formato; ramis oppositis; hyphopodiis capitatis numerosissimis, oppositis, cellula superiore ovata, 9-10 μ longa, 6 μ lata, cellula inferiore 4-5 μ longa; hyphopodiis mucronatis ampulliformibus, irregularibus, usque ad 15 μ longis; setis paucis, rectis, erectis, opacis, acutis, 450-600 μ longis, ad basim 10 μ latis; peritheciis numerosis, globosis, atris, subopacis, 120-130 μ diam.; ascis ovatis 40 × 20, 4-sporis; sporidiis subcylindraceis, utrinque late rotundatis, 4-septatis, ad septa leviter constrictis, brunneis, 30 × 12-15.

Hab. ad folia Amooraе (Meliaceae), Mount Binuang, Prov. Tayabas Luzon, Ins. Philipp. (Ramos et Edaño).

142. **Meliola banahaensis** H. S. Yates, The Philipp. Journ. of Sc., Bot., 4484
13., 1918, p. 364. — Hypophylla, plagulas orbiculares 3-8 mm. diam. velutinas atras formans; mycelio ex hyphis densissime intertextis ramosis castaneo-brunneis 7-8 μ crassis formato; hyphopodiis capitatis alternantibus, cellula superiore ovata 12-15 μ diam., cellula inferiore brevi, 6-8 μ longa; hyphopodiis mucronatis paucis, irregularibus, ampulliformibus, usque ad 20 μ longis; setis mycelicis numerosissimis, rectis, erectis, ad basim geniculatis, tota longitudine opacis, 300-350 μ longis, 8-10 μ latis; ad apicem acutis vel bi-trifurcatis, dentibus 5-8 μ longis; peritheciis numerosis, 200-250 μ diam., atris, opacis; ascis 65-75 × 30, bisporis; sporidiis cylindraceis, utrinque late rotundatis, 4-septatis, ad septa constrictis, brunneis, 50-55 × 19-21.

Hab. in foliis Dysoxyli (Meliaceae), Mount Banahao Prov. Laguna Luzon, Ins. Philipp. (Ocampo).

143. **Meliola Guareae** Speg., Mycet. Argent. VI, Anal. Mus. Nac. Bue- 4485
nos Aires XXIII p. 42 (1912). — Caespitulis epiphyllis, saepius confluenti-repandulis, 2-10 mm. diam., sublatiuscule fibrillosis, parcissime setulosis, siccando frustulatim deciduis, hyphis laxe intertextis, rectis; 10 μ cr., opposite ramosis, laxe patentimque hyphopodiatis; hyphopodiis 2-cellularibus, 20-25 × 10, cylindraceis vel subclavulatis, alternis; rarissime ampulliformibus et oppositis, patentissimis vel leniter subretrorsis; setulis sparsis vel hinc inde paucigregariis, erectis, rigidulis, acutissimis, 250-1000 × 10, opace nigris; peritheciis e globoso depressis, 180-200 μ diam., coriacellis, astomis, vix papillatis; contextu opaco indistincto; ascis ellipsoideis, mox diffluentibus, bisporis; sporidiis cylindraceis, quadrisep-

tatis, ad septa non vel vix constrictis, utrinque late rotundatis, 50 × 20, loculis omnibus subaequalibus grosse 1-guttatis, e latere sat compressis 16 μ tantum latis, obscure fuligineis.

Hab. in foliis vivis Guareae Balansae (Meliaceae), in silvis prope Puerto Leòn, Misiones, Argentina.

144. **Meliola guareicola** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 521. — Coloniis epiphyllis, circularibus, punctiformibus, 1-4 mm. diam., atris; mycelio dense contexto, crustam facile separabilem efformante; hyphopodiis capitatis alternis vel irregularibus, crebris, cellula capitata globulosa, ovoidea vel piriformi, 14 × 10, basilari 2-3 μ longa; hyphopodiis mucronatis alternis vel oppositis, ampulliformibus, collo tenui, 16-18 × 7; setis perithecialibus nullis, mycelialibus copiosis, colonias dense tegentibus, 200-300 × 7, fuscis, apice acuto pallidis, in parte superiore uncinatis vel contortis; peritheciis minutis, 100-500 μ, distincte ostiolatis; ascis mox evanidis; sporidiis 4-septatis, brunneis, leniter constrictis, obtusis, 37 × 10. 4486

Hab. in foliis Guareae trichilioidis (Meliaceae), Porto Rico. — *M. Guareae* saepe consociata, a qua setis uncinatis facile dignoscitur.

145. **Meliola platysperma** Theiss., Broteria, Bot., v. XII, 1914, fasc. I, p. 23. — Plagulae piceo-atrae, 4 mm. diam., orbiculares. Hyphae mycelii rubro-brunneae, opposite ramosae, 10 μ crassae, dense intertextae, cellulis ca. 25 μ longis. Hyphopodia capitata alterna, elongato-clavata, pedicellata, saepe unilateralia, 27 μ longa, supra 12-14 μ lata; hyphopodia mucronata typice opposita, ampulliformia, sinuose recurvata, continua. Setae myceliales atro-nitentes numerosae, basi geniculatae 10 μ crassae, rectae, apice obtusae, laetiores 5 μ crassae, integrae, 500-700 μ longae. Perithecia 250-280 μ diam., globulosa grosse verrucosa, atro-nitentia, aetate umbilicata, demum collapsa, cellulis polygoniis ca. 50 μ magnis, rubro-brunneis extus acute prominulis contexta. Asci 4-spori, maturitate ovato-piriformes, usque 90 × 75. Sporae brunneae, 4-septatae, utrinque rotundatae, vix constrictae, 50-56 × 24-28, cellulis aequalibus. 4487

Hab. epiphylla in foliis Guareae (Meliaceae), S. Leopoldo, Brasiliae merid. (J. Rick).

146. **Meliola opposita** Syd. in Leaflets of Philipp. Bot. VI (1913) p. 1924. — Hypophylla, maculas aterrimas, velutinas, primo rotundatas, 3-10 mm. latas, saepe confluendo irregulares et multo majores efformans; mycelio ex hyphis ramosis, obscure fuscis, 7-10 μ 4488

latis; septatis, composito; hyphopodiis capitatis numerosissimis et confertis, plerumque oppositis, rarius alternis, bicellularibus, rectis vel leniter curvatis, fuscis, 17-22 μ longis, cellula basali brevi, superiore subglobosa, 9-12 μ lata; hyphopodiis mucronatis oppositis, ampulliformibus, 18-24 μ longis; setis mycelicis numerosissimis, rectis, erectis, rigidis, usque ad apicem opacis, apice acutis, 300-4000 × 8-9; peritheciis numerosissimis, globosis, atris, 150-185 μ diam.; in sicco profunde collapsis, rugulosis; ascis ovatis, 2-3-sporis, 40-50 × 20-25; sporidiis oblongis, utrinque rotundatis, 4-septatis, ad septa constrictis, fusco-brunneis, 34-38 × 12-16.

Hab. in foliis vetustis Meliaceae cujusdam, Cabadbaran, Mindanao, ins. Philipp. — Hyphopodiis capitatis typice oppositis, setis copiosis, acutis, obscuris et peritheciis collapsis dense gregariis praecipue distincta.

147. **Meliola parvula** Syd. in Leaflets of Philipp. Bot. VI (1913) p. 1925. — Mycelio hypophyllo, non vel parum maculiformi, subeffuso, laxo, ex hyphis longiusculis, ramosis, septatis, 5-6 μ crassis composito; hyphopodiis capitatis numerosis, oppositis vel alternantibus, pro ratione parvulis et gracilibus, 11-17 × 5-6, cylindraceis, rectis, apice semper rotundatis, cellula basali brevi; hyphopodiis mucronatis oppositis, usque ad 21 μ longis; setis mycelicis modice evolutis, rectis, erectis, rigidis, simplicibus, 300-700 × 7-9, inferne opacis, superne dilutioribus, apice acutiusculis; peritheciis laxe dispositis, globosis, parum tuberculatis, atris, 150-180 μ diam., in sicco collapsis, contextu e cellulis 9-11 μ diam. composito; ascis ovatis, 2-3-sporis, 35-40 × 22-30; sporidiis oblongis, utrinque obtusis, 4-septatis, ad septa constrictis, fuscis, 28-32 × 11-14. 4489

Hab. in foliis vetustis Meliaceae cujusdam, Cabadbaran, Mindanao, ins. Philipp. — Hyphopodiis pro ratione gracilibus et sporidiis parvulis praecipue distincta.

148. **Meliola Sandorici** Rehm, Ascomyc. Philipp. III, in Philipp. Journ. of Sci. VIII (1913) p. 391. — Mycelio plagulas epiphyllas, velutinas, orbiculares, nigritulas, dispersas, 2-4 mm. latas formante; hyphis centrifugis, ramosis, fuscis, ad 8 μ latis, hyphopodiis capitatis alternantibus, oblongo-clavatis, crebris, 2-cellularibus, 12 × 6-8 et hyphopodiis mucronatis 15 × 7-8 obsessis; setis nullis; peritheciis in centro mycelii sparsis, globulosis, astomis, usque ad 150 μ diam., atris; ascis 2-sporis, 30 × 20; sporidiis oblongis, utrinque rotundatis, 4-septatis, flavo-fuscis, subconstrictis, 30 × 10-12. 4490

Hab. ad folia Sandorici indici (Meliaceae), Luzon, Prov.

Laguna, Los Baños, ins. Philipp. (BAKER). — A *M. Usteriana* Rehm recedit hyphis elongatis sporidiisque constrictis.

149. **Meliola sinuosa** Doidge, Trans. R. Soc. South Afr. V, 1917, p. 735 et 746, t. 64 fig. 33. — Amphigena, plerumque hypophylla, maculas, atras, velutinas, 1-5 mm. diam. efficiens; hyphis sinuosis, 5-11 μ crassis, interdum ad septa constrictis, cellulis 18-44 μ longis, ramis oppositis v. unilateralibus, saepe anastomosantibus; hyphopodiis capitatis alternis v. unilateralibus, 18-25 × 12-15, stipitatis, cellula superiore 14-15 μ long., forma varia subcylindrica, curvata v. sublobata, apice truncata v. convexa; hyphopodiis mucronatis raris, 14-15 × 10-16; setis mycelio numerosis, sparsis, erectis, simplicibus, 250-350 × 8-10, opacis; peritheciis sparsis, atris, globulosis, 160-220 μ diam.; ascis elliptico-ovatis, breviter pedicellatis, bisporis, sporidiis 4-septatis, cellula media majore, cylindricis, utrinque rotundatis, ad septa leniter constrictis, 50-55 × 15-18. 4491

Hab. in foliis Trichiliae emeticae (Meliaceae), Lemana, Spelonken, Zoutpansberg Dist. Africa austr. (E. M. DOIDGE).

150. **Meliola Trichiliae** Beeli, Bull. Jard. Bot. État Bruxelles, v. 7., 1920, p. 99. — Epiphylla, maculas irregulares parum conspicuas atro-griseas, 2-5 mm. diam., efformans; mycelio denso brunneo, hyphis rectis opposite ramosis 24-30 × 8; hyphopodiis capitatis numerosis, confertissimis oppositis raro alternis, cylindraceis, cellula superiori 20-25 × 12, basali 6-8 × 8; hyphopodiis mucronatis non visis; setis mycelicis numerosis, sparsis, opacis, rectis v. subrectis, septatis, simplicibus, apice pellucidis acutis, 300 × 10-12; peritheciis verrucosulis, leniter depressis, atris, 200 × 240 μ diam.; ascis evanidis; sporidiis 4-septatis, brunneis, cylindraceis, leniter constrictis, obtusis, 50-52 × 16-18. 4492

Hab. in foliis Trichiliae retusae (Meliaceae), ad ripas Aruwimi, Congo Africae (BEQUAERT). — Proxima *M. deciduae, parvulae, sinuosae.*

151. **Meliola leptochaeta** Syd., Ann. Mycol. 15., 1917, p. 187. — Hypophylla, plagulas irregulares primitus minutas dein plus minus effusas saepe confluentes praecipue nervos sequentes atro-griseas formans; mycelium densissinum, ex hyphis copiose ramosis anastomosantibusque 6-9 μ crassis fuscidulis flexuosis vel torulosis formatum; hyphopodia modice copiosa, alternantia, oblonga, 12-19 μ longa, integra, cellula superiore 7-9 μ lata, inferiore brevi; hyphopodia mucronata rara, singularia vel opposita, 18-25 μ longa; setae mycelicae modice numerosae, graciles haud rigidae, 250-340 μ longae, 4493

basi 7-9 μ latae, inferne atrae opacae, superne pellucidae, obtuse attenuatae, apicem versus saepe leniter flexuosae; perithecia sparsa, globosa, astoma, glabra, 150-200 μ diam.; asci 2-4-spori; sporae cylindraceae, 4-septatae, leniter constrictae, utrinque rotundatae, 35-42 × 12-14, cellulis aequalibus; conidia 4-cellularia, 30-38 μ longa, cellulis duabus mediis multo majoribus 9-10 μ latis obscurioribus, cellulis extimis appendiculiformibus pallidioribus multo minoribus angustioribusque.

Hab. in foliis V a v a e a e spec. (Meliaceae), Rizal, Luzon Ins. Philipp. (H. S. Yates).

152. **Meliola banguiensis** H. S. Yates, The Philipp. Journ. of Sc., Bot., 13., 1918, p. 365. — Amphigena, plerumque epiphylla, plus minus effusa, plagulas subarachnoideas, orbiculares, 0,3-2,0 cm. diam., vel confluentes efformans; mycelio modice evoluto, ex hyphis ramosis brunneis 7-8 μ diam. composito; hyphopodiis capitatis alternantibus, numerosis, cellula superiore ovata, 10-18 μ longa, 10-12 μ lata, cellula inferiore 5 μ longa; hyphopodiis mucronatis plerumque oppositis, ampulliformibus, 18-22 μ longis, setis mycelicis numerosis, 350-650 μ longis, 10-12 μ crassis, circa perithecia oriundis, erectis, rectis, simplicibus, atris, opacis, apicibus acutis; perithecis numerosis, globosis, in sicco collapsis, 124-175 μ diam., tuberculatis; ascis ovatis, 6-8 sporis, 40 × 18, evanescentibus, sporidiis oblongis, 4-septatis, ad septa leviter constrictis, brunneis, 36-40 × 11-14. 4494

Hab. ad folia M e n i s p e r m a c e a e cujusdam, Bangui, Llocos Norte, Prov. Luzon, Ins. Philipp. (Ramos).

153. **Meliola Mollinediae** Theiss., Broteria, Bot., v. XII, 1914, fasc. I, p. 24, fig. 4. — Epiphylla. Hyphae mycelii opposite ramosae rectilineae, cellulis elongatis, brunneolae, 6-8 μ crassae. Hyphopodia capitata distantia, alterna, 16-22 × 10-12, pedicellata, capitulo plerumque recurvato et diverse lobato, rarius integro clavato; hyphopodia mucronata opposita, versiformia, lata basi sessilia, alia clavata integra vel subclavata, alia in collum brevissimum angustata vel demum longius producta, recta vel apice solum incurva vel sinuosa. Setae myceliales 300 μ longae, basi 8 μ crassae non geniculatae, apice longe attenuatae, acutatae. Perithecia ca. 200 μ diam., globulosa, plerumque sub basi setis mycelialibus circumdata, astoma, aetate collapsa parenchymatice contexta (cellulis polygoniis 10-15 μ cr., brunneis, in parte superiore, perithecii membrana exteriore obscuriore et crassiore, modice angulose prominulis). Asci 4495

2-3-spori, elliptici, 48-56 × 28-35; sporae rectae, cylindricae, brunneae, 4-septatae, 36-40 × 13-16, ad septa leniter constrictae, cellulis fere aequalibus.

Hab. in foliis Mollinediae (Monimiaceae), S. Leopoldo, Brasiliae meridionalis (J. Rick).

154. **Meliola Artocarpi** H. S. Yates, Philipp. Journ. Sc. Manila XII (1917) p. 362 (*M. Artocarpiae*). — Mycelio epiphyllo, plagulas atras, orbicularis, 3-5 mm. diam., ex hyphis sparsis brunneis septatis 8-10 μ crassis composito, ramis irregularibus; hyphopodiis capitatis numerosis, alternantibus vel irregularibus, cellula superiore globosa, 15 μ lata v. 24 × 18; hyphopodiis mucronatis, paucis, irregularibus, ampulliformibus, 15-17 μ longis; setis mycelicis numerosis, 350-500 μ longis, erectis, ad basim abrupte geniculatis et 10 μ crassis, inferne atris, superne obscure brunneis acutis vel obtusis; peritheciis numerosis, 100-200 μ diam., globosis opacis tuberculatis; ascis 2-4-sporis, 70-80 × 20-35; sporidiis brunneis, 4-septatis, cylindraceis, ad septa constrictis, utrinque late rotundatis 50-55 μ longis, 20-25 μ latis. 4496

Hab. in foliis Artocarpi sp. (Moraceae), Catubing River, Samar, Ins. Philipp. (Ramos).

155. **Meliola microtricha** Sydow, Ann. Mycol. 18., 1920, p. 157. — Epiphylla, plagulas primitus orbiculares velutinas dein confluendo irregulares 1-5 mm. diam. formans; mycelium densissime intertextum, ex hyphis suberectis vel undulatis dense breviterque ramosis septatis castaneo-brunneis 8-10 μ crassis compositum; hyphopodia capitata sat numerosa, alternantia, 20-25 μ longa, cellula apicali integra vel fere integra saepe irregulari 15-18 μ longa vel lata, cellula basali plus minus longiore et angusta; hyphopodia mucronata non visa; setae mycelicae copiosissimae, rectae vel subrectae, ad apicem attenuatae, tota longitudine opacae, simplices, 150-200 μ longae, basi 7-9 μ latae; setae peritheciales etiam numerosae, mycelicis similes, sed plerumque paullo breviores et saepe ad apicem obtusae et pellucide fuscae; perithecia numerosa, gregaria 140-180 μ diam.; asci bispori; sporae oblongae, utrinque obtusae, fuscae, 4-septatae, non vel vix constrictae, 40-43 × 15-18. 4497

Hab. in foliis Fici albae (Moraceae), in insula Singapore, Straits Settlements, Asia (C. F. Baker).

156. **Meliola umirayensis** H. S. Yates, The Philipp. Journ. of Sc., Bot. 13., 1918, p. 370. — Maculas plerumque epiphyllas, atras, suborbiculares et 4-10 mm. diam., vel confluentes et magnam partem fo- 4498

lii occupantes efformans; mycelio abundante, ex hyphis brunneis 6-8 μ composito; hyphopodiis capitatis numerosis, alternantibus, cellula superiore subglobosa vel lobata, 14-18 μ diam., cellula inferiore 12-16 μ longa, 5-6 μ lata; hyphopodiis mucronatis non visis; setis nullis; peritheciis paucis, 100-150 μ diam. atris, opacis; ascis bisporis 50 × 20; sporidiis 3-septatis, ad septa constrictis, elongatis, utrimque late rotundatis, laeviter brunneis, 40-45 × 12-14.

Hab. in foliis F i c i (Moraceae), Umiray Prov. Tayabas, Luzon, Ins. Philipp. (Ramos et Edaño).

157. **Meliola Ficium** H. S. Yates, The Philipp. Journ. of Sc., Bot., 13., 1918, p. 368. — Epiphylla, maculas atras, suborbiculares, 4-8 mm. diametro vel aggregatas subpelliculosas efformans; mycelio ex hyphis intertextis radiantibus ramosis castaneo-brunneis 6-7 μ crassis formato; hyphopodiis capitatis numerosis, alternantibus, cylindraceis, cellula superiore ovata vel subglobosa, 10-12 μ diam.; cellula inferiore 4-5 μ longa; hyphopodiis mucronatis rarissimis, irregularibus, ampulliformibus, usque ad 20 μ longis; setis perithecii erectis, rectis vel leviter curvatis, atris, opacis, 500-600 μ longis, 15 μ latis, ad apicem acutis; peritheciis numerosis, globosis, tuberculatis, atris, opacis, 200-225 μ diam.; ascis bisporis, ellipsoideis, 45-50 × 15-30; sporidiis oblongis, 4-septatis, ad septa constrictis, brunneis, utrinque rotundatis, 45-50 × 15-18. 4499

Hab. ad folia F i c i sp. (Moraceae), Mount Banahao Prov. Laguna, Luzon, Ins. Philipp. (Ocampo).

158. **Meliola Soroceae** Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires XXIII p. 44 (1912). — Caespitulis amphigenis, plerumque vero hypophyllis, suborbicularibus, 2-10 mm. diam., submembranaceis, setulosis, arcte adnatis, numquam sponte deciduis; hyphis saepius alterne ramosis, 7-9 μ cr., flexuosulis; hyphopodiis alternis, antrorsis, cylindraceis vel subclavulatis, bicellularibus, 25-30 × 9-12, fuligineis; setis erectis, leniter flexuosis, fuligineis, 200-350 × 10, apice attenuatis ibique 2-3-lobulatis vel 2-3-fidis, denticulatis; peritheciis subglobosis, 150-250 μ diam., glabris, astomis, non collabentibus, fragillimis; ascis non visis; sporidiis cylindraceis, utrinque obtusissimis, e latere non compressis, 55 × 20-22, quadriseptatis, vix constrictis, loculis omnibus aequalibus grosse 2-guttulatis. 4500

Hab. in foliis vivis S o r o c e a e i l i c i f o l i a e (Moraceae), in silvis propre Puerto Leòn, Misiones, Argentina.

159. **Meliola Myrsinacearum** Stev., Mel. Porto Rico, in Ill. Biol. Mo- 4501

nogr. II, 1916, p. 508. — Coloniis amphigenis, in epiphyllo copiosioribus, irregulariter circularibus, 1-10 mm. diam., confluentibus; mycelio atro dense reticulato-contexto, hyphis 10 μ cr. plerumque opposite ramosis; hyphopodiis capitatis alternis, unilateralibus vel irregulariter sparsis, non crebris, uno in quaque cellula, cellulis 34 μ circ. longis, cellula capitata subcylindrica vel anguste piriformi, 20 × 14, basilari 2-4 μ longa; hyphopodiis mucronatis paucis, sparsis, alternis seu oppositis, ampulliformibus, 24 × 10; setis perithecialibus nullis, mycelialibus paucis vel nullis in coloniis juvenilibus, in vetustis copiosis, rectis vel leniter curvis, 625 et ultra μ longis, 10 μ cr., ubique fuscis, apice obtusis; peritheciis 200 μ diam., scabriusculis; ascis mox evanidis; sporidiis 4-septatis, brunneis, leniter constrictis, obtusis, 51 × 17-20.

Hab. in foliis Ardisiae guadalupensis (Myrsinaceae), et Myrsinaceae quaedam indeterm., Porto Rico. — *M. amphitrichae* affinis; differt structura hyphopodiorum capitatorum.

160. **Meliola Groteana** Syd., Ann. Mycol. XI, 1913, p. 402. — Mycelio 4502
amphigeno, radiante, maculas orbiculares 2-4 mm. latas saepe confluentes et majores parum velutinas efficiente, ex hyphis fuscis septatis ramosis 7-9 μ latis composito; hyphopodiis capitatis oppositis vel alternantibus, breviter stipitatis, cellula superiore ovoidea vel truncata, 12-17 μ longis; hyphopodiis mucronatis parce evolutis; setis mycelicis numerosissimis, simplicibus, rectis, rarius leniter curvatis, 220-325 μ longis, 7-9 μ latis, tota longitudine pellucidis, superne obtusis, remote septatis; peritheciis sparsis, globosis, astomis, atris, 140-200 μ diam., leniter rugulosis; ascis ovatis, 2-3-sporis, 45-60 × 23-28; sporidiis oblongo-cylindraceis, utrinque late rotundatis, 4-septatis, ad septa saepe valde constrictis, fuscis, 40-46 × 14-17.

Hab. in foliis Maesae lanceolatae (Myrsinaceae), Amani, Africa or. trop. (Grote). — *Meliolae strychnicolae* Gaill. affinis.

161. **Meliola Maesae** Rehm, Ascomyc. Philipp. III, in Philipp. Journ. 4503
of Sci. VIII (1913) p. 392. — Mycelio hypophyllo plagas velutinas, orbiculares, atras, 0,5-2 cm. latas late arachnoideo-marginatas formante; hyphis mycelialibus ramosis, subcurvatis, fuscis, 7-9 μ cr., hyphopodiis capitatis 2-cellularibus, ovoideo-elongatis, rectis vel subcurvatis, 15 × 7-8, alternantibus vel oppositis, hyphopodiis mucronatis oppositis, raris, 15 × 6 obsessis; setis mycelialibus ad basim curvatis, erectis, apice acutatis, obscure fuscis, circ. 250 × 8-9; peritheciis globulosis, astomis, haud verrucosis, in centro mycelii

sparsis, 150 μ circ. diam.; ascis ovoideis, bisporis, 30 × 20; sporidiis oblongis, utrinque obtusis, 5-cellularibus, haud constrictis, flavo-fuscis, 20 × 9-10.

Hab. ad folia et ramos vivos Maesae laxae (Myrsinaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (C. F. Baker). — Affinis *M. Telosmae* Rehm, a qua differt hyphis undulatis et hyphopodiis omnino diversis.

162. **Meliola peregrina** Syd., Enum. Philipp. Fungi II, in Philipp. 4504
Journ. of Sci. VIII (1913) p. 479. — Amphigena, maculas atras minutissimas $^1/_3$-1,5 mm. diam. discoideas formans; mycelio ex hyphis radiantibus, ramosis, longiusculis, castaneo-brunneis, septatis, 7-9 μ crassis formato; hyphopodiis capitatis innumeris, densissime stipatis, alternantibus, obscure brunneis, 12-17 × 10-12, cellula superiore late rotundata, inferiore brevi; hyphopodiis mucronatis rarissimis; setis nullis; peritheciis plerumque solitariis in quaque macula, rotundatis, applanatis, atris, ostiolatis, 200-300 μ latis, contextu opaco indistincte hyphoideo; ascis ovatis, bisporis, 45-54 × 25-35; sporidiis oblongis, utrinque late rotundatis, 4-septatis, ad septa constrictis, obscure fuscis, 34-41 × 12-16.

Hab. in foliis vivis Maesae laxae (Myrsinaceae), Luzon, Prov. Nueva Vizcaya, ins. Philipp. — *M. clavisporae* Pat. habitu subsimilis.

163. **Meliola furcillata** Doidge, Trans. R. Soc. South Afr. V, 1917, p. 738 4505
et 747, t. 65 f. 39. — Amphigena, maculas tenues atras, 2-3 mm. diam. efficiens; hyphis rectis v. sinuosis, fuscis, 6-8 μ crassis, cellulis 18-21 μ long. compositis, ramis oppositis v. alternis v. unilateralibus, breviter stipitatis 18-21,5 μ long., cellula superiore ovata recta, incurvata v. recurvata 10,5-12,5 × 7-9, hyphopodiis mucronatis inter hyphopodia capitata intersparsis, 14-18 μ long., ampullaceis, collo longiore plerumque curvato; setis mycelicis prope perithecia congregatis, 330-400 × 7, basi opacis semel v. bis abrupte geniculatis, superne rectis, rigidis, pellucidis, plus minusve torulosis, prope apicem leniter constrictis, apice mucronatis v. 2-3 dentatis; peritheciis sparsis v. subaggregatis, atris globosis, verrucosis, 160-180 μ diam.; ascis 2-sporis; sporidiis, 4-septatis, cylindricis, utrinque, rotundatis, ad septa constrictis, 43-45 × 16-18.

Hab. in foliis Maesae rufescentis (Myrsinaceae), Amauzimtoti, Natal, Africa austr. (E. M. Doidge).

164. **Meliola parathesicola** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. 4506
II, 1916, p. 492, fig. 20. — Coloniis hypophyllis, irregulariter cir-

cularibus, punctiformibus, 1-2 mm. diam., mycelio brunneo contextum compactum efformante, hyphis 8 μ diam. irregulariter ramosis, hyphopodiis capitatis alternis vel sparsis, creberrimis, inter se adjacentibus, cellula capitata ovoidea vel subglobulosa, interdum leniter angulosa, 20 × 14, basilari 3-7 μ longa; hyphopodiis mucronatis paucis, sparsis, alternis seu oppositis, ampulliformibus, 20 × 7; setis mycelialibus nullis, perithecialibus paucis, 1-5, basilaribus, rectis, circ. 90 × 7, apice obtusis, ubique fuscis; peritheciis 135-150 μ diam., papillis latiusculis conoideis asperatis; ascis mox evanidis; sporidiis 4-septatis, brunneis, cylindraceo-ellipsoideis, leviter constrictis, obtusis, 48 × 20.

Hab. in foliis P a r a t h e s i s s e r r u l a t a e (Myrsinaceae), Porto Rico. — Affinis *M. mayapaeicolae;* differt setis perith. et structura hyphop. capitatorum.

165. **Meliola Linocierae** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 550. — 4507
Epiphylla, plagulas minutas primo orbiculares 2-5 mm. diam. dein irregulares confluentes leniter velutinas atras formans; mycelio ex hyphis densissime intertextis breviter ramosis copiose anastomosantibus castaneo-brunneis 6-8 μ crassis formato; hyphopodiis capitatis numerosis, alternantibus v. saepe dense approximatis, crasse cylindraceis, integris, 16-22 × 10, cellula superiore ovata, basali brevi; hyphopodiis mucronatis oppositis, usque 26 μ long.; setis mycelicis numerosissimis, rectis, simplicibus, ad apicem acutis, atris tota longitudine opacis, 150-200 × 5-8; peritheciis sparsis, minutis, 70-100 μ diam., astomis; ascis 2-3 sporis; sporidiis ellipsoideo-oblongis v. oblongis, 4-septatis, constrictis, castaneo-brunneis, 32-38 × 14-18; hyphis conidiophoris simplicibus, dilute fuscis, copiose septatis (articulis 20-25 μ long.) toruloso-flexuosis, 4-6 μ crassis; conidiis fusiformibus, basi rotundatis, ad apicem flagellatis, 3-septatis, non constrictis, dilute fuscis, 24-38 × 6-8.

Hab. in foliis L i n o c i e r a e C u m i n g i a n a e (Oleaceae), Antipolo prov. Rizal Ins. Philippin. (M. Ramos).

166. **Meliola tayabensis** H. S. Yates, Philipp. Journ. Sc. Manila XII 4508
(1917) p. 369. — Hypophylla, maculas atras, orbiculares 1-2 cm. diam., saepe confluentes et irregulares, dein plus minusve totam superficiem folii obtegentes; mycelio ex hyphis obscure brunneis rectis septatis irregulariter ramosis 6 μ latis composito; hyphopodiis capitatis numerosis, alternantibus cellula superiore subglobosa circiter 10 μ lata, inferiore 6-7 μ longa; hyphopodiis mucronatis irregularibus, ampulliformibus, usque ad 17-20 μ longis, setis my-

celicis numerosis, 250-300 μ longis, 8-10 μ latis, erectis, rectis vel leviter curvatis, atris, opacis, apice simplicibus, acutis vel obtusis; peritheciis paucis globosis, glabris, atris, opacis, 150-200 μ diam., in sicco collapsis; ascis evanescentibus; sporidiis 4-septatis, fuscis, cylindraceis, utrinque late rotundatis, ad septa leviter constrictis, 40-50 × 14-16.

Hab. in foliis Linocieraе sp. (Oleaceae), Basiad, Prov. Tayabas Luzon, Ins. Philipp.

167. **Meliola Mayepeae** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 596, fig. 46. — Coloniis amphigenis, plerumque vero epiphyllis, circularibus, 1-5 mm. diam.; mycelio atro densiuscule reticulato, hyphis 7 μ cr., ramis oppositis, saepius angulum acutum efformantibus; hyphopodiis capitatis minutis, alternis, non confertis, uno pro cellula, cellulis 35 μ c. longis, cellula capitata obovoidea 10 × 7, basilari 3 μ longa; hyphopodiis mucronatis non visis; setis perithecialibus nullis, mycelialibus paucis vel copiosis, circa peritheciа saepe abundantibus, leniter curvis, circ. 250 × 6, ubique fuscis, apice simplici obtuso; peritheciis 170 μ diam., scabris; ascis cito diffluentibus; sporidiis 4-septatis, brunneis, lenissime constrictis, obtusis, 30-35 × 17. 4509

Hab. in foliis Mayepeae domingensis (Oleaceae), Mayaguez Mosa et El Alto de la Bandera, Porto Rico. — A *M. brasiliensi* distinguitur forma hyphopodiorum capitat. et basi setarum.

168. **Meliola mayepeicola** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 519. — Coloniis epiphyllis, circularibus, punctiformibus, 1-2 mm. diam.; mycelio atro, hyphis 9 μ crassis, ramis plerumque oppositis, dense reticulato-contextis; hyphopodiis capitatis latis, alternis, crebris, uno pro cellula, cellulis 20 μ circ. longis, cellula capitata piriformi, 24 × 17, basilari 7 μ longa; hyphopodiis mucronatis paucis, alternis vel oppositis, phialiformibus, curvulis, angustis, 16-18 × 6; setis perithecialibus nullis, mycelialibus paucis, rectis vel leniter curvatis, 150 × 7, ubique fuscis, apice obtusis; peritheciis 100-119 μ diam., ob papillulas conoideas scabris; ascis cito diffluentibus; sporidiis 4-septatis, brunneis, lenissime constrictis, obtusis, 34 × 14. 4510

Hab. in foliis Mayepeae domingensis (Oleaceae), Mayaguez Mesa et Maricao, Porto Rico. — A *M. Mayepeae*, cui saepe socia, etiam nudo oculo dignoscitur.

169. **Meliola Opiliae** H. et P. Sydow, Ann. Mycol. XI, 1913, p. 327. — Maculas amphigenas velutinas orbiculares minutas 2-3 mm. latas 4511

dein plus minus confluentes atras efformans; hyphis ramosis, obscure brunneis, septatis, 7-9 μ crassis; hyphopodiis capitatis numerosissimis, semper exacte oppositis v. suboppositis, clavatis, regularibus, 16-18 μ long., cellula superiore late rotundata, inferiore multo breviore; hyphopodiis mucronatis rarioribus, oppositis, ampulliformibus, 17-20 μ long.; setis mycelicis numerosis, rigidis, erectis simplicibus, apice obtusis v. dentatis aut 2-3-furcatis (dentibus usque 10 μ long.), obscure brunneis, 200-280 μ long., 10-11 μ cr.; peritheciis numerosis, aggregatis, globosis, 175-210 μ diam., vix tuberculatis; ascis ellipticis v. ovatis, 3-4 sporis, 40-48 × 19-24; sporidiis oblongis, utrinque rotundatis, 4-septatis, ad septa constrictis, obscure brunneis, 36-42 × 10-16.

Hab. in foliis Opiliae amentaceae Roxb. (Opiliaceae), Bolampatty valley Coimbatore Madras Pres., Indiae or. (C. E. C. Fischer). — Socia *Asterina crebra* H. Syd.

170. **Meliola Livistoniae** H. S. Yates, Philipp. Journ. Sc. XII (1917) 4512
p. 366. — Hypophylla, plagulas aterrimas, velutinas, orbiculares, 3-5 cm. diam.; mycelio laxo, ex hyphis irregulariter ramosis obscure brunneis septatis 6-7 μ crassis ex peritheciis radiantibus compositio; hyphopodiis capitatis paucis, alternantibus vel irregularibus, numquam oppositis, cellula superiore irregulariter lobata, circiter 15-25 μ diam., cellula inferiore saepe curvata 20-25 μ longa; hyphopodiis mucronatis paucis, ampulliformibus, usque ad 20 μ longis, setis mycelicis numerosissimis, 300-350 μ longis, 8-9 μ latis, erectis, rectis vel leviter curvatis, opacis, acutis vel 2-3 denticulatis, dentibus 5-6 μ longis; peritheciis globosis, opacis, atris, tuberculatis, 175-250 μ diam.; ascis evanescentibus; sporidiis oblongis, 4-septatis, ad septa leviter constrictis, brunneis, utrinque late rotundatis, 50-55 × 12-22.

Hab. in foliis Livistonae sp. (Palmae), Basiad, Tayabas, Luzon, Ins. Philipp.

171. **Meliola incompta** Sydow, Ann. Mycol. 18., 1920, p. 98. — Epi- 4513
phylla, plagulas primitus orbiculares dein confluendo irregulares tenues variae magnitudinis formans; mycelium densissime reticulatum, ex hyphis brevibus copiosissime ramosis anastomosantibusque septatis castaneo-brunneis 6-8 μ crassis compositum; hyphopodia capitata numerosissima, opposita vel unilateralia, cellula superiore globosa vel subglobosa integra ca. 12 μ alta 10 μ lata, cellula inferiore brevissima saepe vix conspicua; hyphopodia mucronata multo rariora usque 24 μ longa; setae myceliales copiosae,

rectae, ad apicem acutae, tota longitudine opacae vel superne pellucidae, simplices, 350-600 μ longae, inferne 10-12 μ crassae; perithecia laxe gregaria, 80-110 μ diam.; asci 2-3-spori, fugaces; sporae cylindraceae, 4-septatae, leniter constrictae, utrinque rotundatae, 38-42 × 12.

Hab. in foliis Phytolaccae dininae (Phytolaccaceae), Los Baños, Ins. Philippin. (F. Clara).

172. **Meliola Gaillardiana** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 529, fig. 55. — Coloniis epiphyllis, minutis, circularibus, 1-2 mm. latis, atris; mycelio irregulari, undulato, densissime reticulato contexto, ramis 9 μ cr., cellulis 14 μ circ. longis; hyphopodiis capitatis parvis, alternis vel sparsis, crebris, 7-17 μ inter se distantibus, ovoideis, piriformibus vel curvatis, 10 μ diam., cellula basilari 5-6 μ longa; hyphopodiis mucronatis paucis, sparsis, alternis vel oppositis, phialiformibus, rostro tenuiusculo; setis mycelialibus copiosis, rectis, rigidis, 220 × 10, opacis, apice cristam minute spinulosam 17-34 μ latam, interdum furcatam gerentibus; peritheciis 170 μ diam., leniter scabris, papillulis vix 6 μ altis, ostiolo nullo; ascis mox evanidis; sporidiis 4-septatis, brunneis, lenissime constrictis, obtusis, loculis terminalibus longioribus, 14 × 3. 4514

Hab. in foliis Piperis aduncti (Piperaceae), Porto Rico. — Ob setas apice cristatas perdistincta species.

173. **Meliola paucipes** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 510, fig. 40. — Coloniis amphigenis, plerumque hypophyllis, irregularibus, sparsis, diffusis, 5-10 mm. diam., mycelio ex hyphis 7 μ cr., irregulariter ramosis laxe contextis composito; hyphopodiis capitatis alternis vel irregularibus, inter se distantibus, 70-100 μ, ovoideis vel piriformibus, saepe angularibus, cellula capitata 17 × 14, basilari 4 μ circ. longa; hyphopodiis mucronatis plerumque alternis, ampulliformibus; setis mycelialibus nullis, perithecialibus sparsis, longissimis, 700 × 10, rectis, simplicibus, apice obtusis; peritheciis 160 μ diam., leniter scabris, non ostiolatis; ascis evanescentibus; sporidiis 4-septatis, brunneis, lenissime constrictis, obtusis, 37 × 14. 4515

Hab. in foliis Piperis blattarum (Piperaceae), Mayaguez Mesa, Porto Rico. — Setis mycelialibus elongatis et hyphopodiis remotis praecipue dignoscenda.

174. **Meliola contorta** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 500 fig. 30. — Coloniis amphigenis, plerumque hypophyllis, irregulariter circularibus, 1-6 mm. diam., atris; mycelio laxiuscule 4516

reticulato-contexto, hyphis 7 μ diam., plerumque opposite ramosis; hyphopodiis capitatis latis, alternis copiosis sed non confertis, ovoideis v. ellipsoideis uno pro cellula, cellulis 35 μ circ. longis, cellula capitata 17 × 10, apice obtusa, basilari 7 μ circ. longa; hyphopodiis mucronatis oppositis, alternis vel sparsis, phialiformibus, collo tenui; setis mycelialibus paucis, sparsis, perithecialibus similibus; setis perithecialibus apice varie incurvis vel uncinatis, sat copiosis ad basim peritheciorum, 150 × 10 circ., apice varie configuratis, nunc leniter attenuatis et papillis lateralibus copiosis acutiusculis praeditis, nunc uncinatis asperulis, nunc breviter dichotomis, ramis apice breviter dentatis; peritheciis 140 μ diam., leniter scabris, non ostiolatis; ascis mox evanidis; sporidiis 4-septatis, brunneis, lenissime constrictis, obtusis, 34-37 × 10.

Hab. in foliis Piperis hispidi (Piperaceae), Las Marias, Porto Rico.

175. **Meliola piperina** Syd., Ann. Mycol., 14., 1916, p. 358. — Amphigena, 4517
plerumque hypophylla, maculas minutas 1-3 mm. atras formans; mycelio repente, ex hyphis longis rectangulariter ramosis fuscis remote septatis, articulis 20-35 μ longis 18-10 μ crassis formato; hyphopodiis capitatis numerosis, alternantibus vel unilateralibus, plus minus longe stipitatis, cellula apicali valde lobata, fere nunquam integra, saepe depressa, hinc latiore quam altiore, 20 μ lata et 18 μ alta, cellula basali (stipite) mox brevi, mox usque 10 μ longa; hyphopodiis mucronatis plerumque oppositis, in collum longum abeuntibus, usque 24 μ longis; setis mycelicis numerosis, aterrimis, tota longitudine opacis, apice acutis, 300-500 μ longis, basi 10-12 μ latis, rectis vel rectiusculis; peritheciis paucis aggregatis, 120-170 μ diam., parum tuberculatis; ascis 2-3 sporis; sporidiis cylindraceis, utrinque rotundatis, 4-septatis, parum constrictis, brunneis, 32-36 × 10-11.

Hab. in foliis Piperis sp. (Piperaceae), Los Baños, ins. Philipp. (C. F. Baker). — *Mel. stenosporae* affinis.

176. **Meliola Osmanthi** Sydow, Ann. Mycol. 18., 1920, p. 157. — Epi- 4518
phylla, plagulas primitus orbiculares 3-5 mm. diam. dein irregulares plus minus confluentes aterrimas formans; mycelium ex hyphis densissime intertextis valde breviterque ramosis septatis castaneis 6-8 μ crassis compositum; hyphopodia capitata copiosissima, densissime gregaria, alternantia vel opposita, semper integra, plerumque ovata, 18-20 μ longa, cellula superiore 9-11 μ lata; setae myceliales copiosae, rectae, simplices, tota superficie opacae, 250-

300 μ longae, basi 8-10 μ crassae, ad apicem acutae; perithecia gregaria, 170-250 μ diam., ob cellulas protuberantes verrucosa; asci nondum maturi.

Hab. in foliis Osmanthi aquifolii (Pirolaceae), Bando, Tokushima, ins. Shikoko, Japoniae (B. KRUG).

177. **Meliola Elmeri** Syd. in Leaflets of Philipp. Bot. V (1912) p. 1537.— 4519
Amphigena, mycelio plagulas circulares 1-3 mm. latas, atras, velutinas efformante, ex hyphis densissime intertextis et valde ramosis, anastomosantibus, 8 10 μ cr., obscure fuscis composito; hyphopodiis alternis, capitato-clavatis, 12-18 × 8-11; setis mycelicis numerosis, rigidis, rectis vel subrectis, simplicibus, opacis, 200-250 μ longis, 6-9 μ cr.; peritheciis laxe aggregatis, atris, globosis, in sicco collapsis, non vel vix rugosis, 130-160 μ diam.; ascis 2-sporis, ovatis, 50 × 35; sporidiis oblongis, 4-septatis, leniter constrictis, utrinque rotundatis, fuscis, 42-50 × 14-17.

Hab. in foliis Pittospori pentandri (Pittosporaceae), Brooks Point, Palawan, ins. Philipp.

178. **Meliola tenuissima** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. 4520
II, 1916, p. 492. — Amphigena sed in hypophyllo magis copiosa; coloniis tenuissimis, nudo oculo inconspicuis ex hyphis undulatis, 7 μ diam., laxe reticulatis efformatis; hyphopodiis capitatis tenuibus, alternis, distantibus, cellula capitata globosa, ovoidali vel piriformi, non angulosa, 10 μ diam., basilari 3 μ circ. longa; hyphopodiis mucronatis paucis, alternis vel oppositis, ampulliformibus, 20 μ longis; setis mycelialibus nullis, perithecialibus paucis, 3 4, rectis, curvatis, vel etiam uncinatis, 100 × 6, apice obtusis ibique interdum inflatis; peritheciis 170 μ diam., leviter scabris; ascis mox evanidis; sporidiis 4-septatis, brunneis, obtusis, ad septa haud constrictis, 34-37 × 14-15.

Hab. in foliis Gouaniae lupuloidis (Rhamnaceae), Yauco et Villa Alba, Porto Rico. — Species exiguitate mycelii fere unica.

179. **Meliola Scutiae** Speg., Mycet. Argent. VI, Anal. Mus. Nac. Bue- 4521
nos Aires XXIII p. 43 (1912). — Caespitulis saepius epiphyllis, parvis, orbicularibus, 1-3 mm. diam., obsolete concentrice zonatis, e membranaceo subcrustaceis, subvelutinis, aterrimis; hyphis ramulosis, rectis, 6-9 μ cr., opposite ramosis, fuligineis; hyphopodiis patentissimis, oppositis, 2-cellularibus, 14-30 × 8-9, e cylindraceo subclavulatis, saepe leniter retrorsum arcuatis; setulis praecipue circa perithecia evolutis, rectis, obtusiuscule acutatis, integerrimis, 200-300 × 7-10, apice pellucidis, ceterum opacis; peritheciis subglobosis

200-400 μ diam., centro caespitulorum insidentibus, glabris, astomis, collabescentibus, nigris; ascis non visis; sporidiis subcylindraceis, utrinque obtuse rotundatis, fuligineis, 36-38 × 16, e latere altero convexulis quadriseptatis, loculis omnibus grosse 1-guttatis.

Hab. in foliis vivis Scutiae buxifoliae (Rhamnaceae), in nemoribus prope Santa Cornelia, Jujuy : Argentina.

180. **Meliola Chiococcae** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 495, fig. 26. — Coloniis epiphyllis, irregularibus, circularibus, 1-5 mm. diam., mycelio atro, laxe reticulato, 7 μ diam., ramis plerumque oppositis et rectangularibus; hyphopodiis capitatis alternis, non crebris, 1 pro cellula, cellulis 20 μ circ. longis, cellula capitata irregulariter globulosa, angulosa, 17 μ diam., basilari 2-6 μ longa; hyphopodiis mucronatis non visis; setis mycelialibus nullis, perithecialibus paucis, rectis vel leniter curvis, 120 × 7, apice obtusis, fuscis; peritheciis 170 μ diam., scabriusculis; ascis mox evanidis; sporidiis 4-septatis, brunneis, leniter constrictis, obtusis, 37-41 × 14. 4522

Hab. in foliis Chiococcae albae (Rubiaceae), Vega Baja et Hormigueros, Porto Rico.

181. **Meliola microspora** Pat. et Gaill. — Syll. IX p. 426 — var. **africana** Doidge, Trans. R. Soc. South Afr. V, 1917, p. 746, t. 63 fig. 29. — Hyphopodiis capitatis, 20-21 × 7-8, cellula sup. ovata 14-16 μ longa; sporidiis 26-32 × 10,5-14. 4523

Hab. in foliis Galopinae circaeoidis (Rubiaceae), Woodbush, Afric. merid.

182. **Meliola Ixorae** H. S. Yates, Philipp. Journ. Sc. Manila XII (1917) p. 365 (*M. Ixoriae*). — Amphigena, maculas atro-griseas, orbiculares vel irregulares, 5-15 mm. diam., saepe confluentes formans; mycelio abundante, ex hyphis septatis flexuosis brunneis 5-8 μ cr. composito; ramis oppositis vel irregularibus; hyphopodiis capitatis numerosis, alternantibus vel unilateralibus, cellula superiore lobata vel rotundata 12-16 μ longa 10-15 μ lata; inferiore 5-12 μ longa, 6 μ lata; hyphopodiis mucronatis paucis, oppositis vel irregularibus, ampulliformibus, 12-14 μ longis; setis mycelicis 600-750 μ longis, 8-10 μ latis, erectis, rectis vel leviter curvatis, saepe ad basim geniculatis, inferne opacis, atris, simplicibus, acutis; setis perithecialibus circ. 8 ad basim quoque perithecii; peritheciis globosis, atris, opacis, tuberculatis, 100-125 μ diam.; ascis, 2-4-sporis 55-65 μ longis, 20-26 μ latis; sporidiis oblongis, utrinque rotundatis, 4-septatis, ad septa non constrictis, saepe leviter curvatis, 4524

40 μ longis, 14 μ latis.

Hab. in foliis Ixoraе philippinensis (Rubiaceae). Manila, Ins. Philipp.

183. **Meliola Mitragynes** Syd., Enum. Philipp. Fungi II, in Philipp. Journ. of Sci. VIII (1913) p. 478. — Mycelio amphigeno, plerumque vero epiphyllo, tenuiter effuso, laxo, ex hyphis longiusculis, parce ramosis, fusco-brunneis, 7-9 μ cr. composito; hyphopodiis capitatis numerosis, alternantibus, ovatis vel oblongis, rectis vel leniter curvatis, 12-17 × 9-13, cellula basali minuta, superiore globosa; hyphopodiis mucronatis, plerumque oppositis, ampulliformibus, usque ad 26 μ longis; setis mycelicis numerosis, simplicibus, rectis vel leniter curvatis, apice acutis, inferne opacis, apicem versus plus minusve dilutioribus, 300-425 × 7-9; peritheciis sparsis, globosis, atris, glabris, 150-180 μ diam., in sicco collapsis; ascis ovatis, bisporis, 44-50 × 25-30; sporidiis cylindraceis, 4-septatis, ad septa leniter constrictis, utrinque late rotundatis, obscure brunneis, 35-42 × 14-16. 4525

Hab. in foliis vivis Mitragynes diversifoliae (Rubiaceae), Luzon, Prov. Nueva Vizcaya, ins. Philipp.

184. **Meliola palawanensis** Syd. in Leaflets of Philipp. Bot. V (1912) p. 1539. — Mycelio amphigeno, plagulas discoidales vel irregulares, minutas, 2-4 mm. diam., saepius confluentes efformante, ex hyphis fuscis, densiuscule ramosis, 6-9 μ crassis composito; hyphopodiis capitatis numerosis, bicellularibus, 16-20 × 10-12, clavatis vel irregularibus; hyphopodiis mucronatis alternantibus vel oppositis, usque ad 16 μ longis; setis mycelicis rectis, erectis, rigidis, simplicibus, 175-250 × 7-9, opacis, apice acutis; peritheciis in mycelio sparsis, globosis, vix rugulosis, atris, 160-180 μ diam.; ascis ovatis, 2-3-sporis, fugacibus; sporidiis oblongis, utrinque rotundatis, 4-septatis, vix vel leniter constrictis, fuscis, 32-36 × 10-12. 4526

Hab. in foliis vetustis Morindae Bartlingii (Rubiaceae), Puerto Princesa, Palawan, ins. Philipp.

185. **Meliola Mussaendae** Syd., Ann. Mycol. 15., 1917, p. 190. — Amphigena, praecipue epiphylla, plagulas arachnoideas tenues irregulares primo minutas 1-2 mm. diam. dein confluentes effusas plus minus confluentes et saepe totam folii superficiem occupantes formans; mycelium ex hyphis brunneis 7-9 μ crassis septatis ramosis compositum; hyphopodia capitata sat numerosa, piriformia, alternantia, 15-22 μ longa, cellula superiore globulosa vel ovata 10-12 μ lata semper integra, inferiore brevi stipitiformi; hyphopodia mucronata 4527

copiosa, alternantia vel opposita, lageniformia, usque 22 μ longa, basi 7-9 μ lata; setae tantum ad basim peritheciorum evolutae, rectae vel subrectae, 170-250 μ longae, ad basim 7-9 μ crassae, sursum 6-7 μ crassae, summo apice late rotundatae et plerumque etiam leniter dilatatae, simplices vel etiam superne semel furcato-divisae (ramis erectis brevibus vel usque 25 μ longis obtusis); perithecia sparsa vel laxe gregaria, globosa astoma, in sicco collapsa, 120-160 μ diam., asci 2-3-spori; sporae oblongae, 4-septatae, leniter constrictae, fuscae, utrinque rotundatae, 26-35 × 11-13.

Hab. in foliis Mussaendae philippicae (Rubiaceae), Laguna et Los Baños, Luzon, Ins. Philipp. (M. Ramos).

186. **Meliola mayaguesiana** Stev., Mel. Porto Rico, in Ill. Biol. Mo- 4528
nogr. II, 1916, p. 500, fig. 31. — Coloniis amphigenis, plerumque hypophyllis, circularibus, 2-8 mm. diam.; mycelio atro densiusculc reticulato-contexto, hyphis 7 μ cr., irregulariter ramosis, contortis. intricatis; hyphopodiis capitatis minutis, alternis, non crebris, 1 pro cellula, cellulis 40 μ circ. longis, cellula capitata ovoidea vel truncata, apice saepe incrassata, 17 × 10, basilari e brevissima 7 μ usque longa; hyphopodiis mucronatis paucis et sparsis, angustis, alternis, ampulliformibus, 27 × 7; setis perithecialibus paucis, 3-10, circ. 100 × 7, ubique atris, contortis, plerumque spiraliter convolutis, interdum glomerulatis, apice obtusis; setis mycelialibus copiosis, rectis vel leniter curvis, longissimis, circ. 800 × 9, fuscis, simplicibus; peritheciis 150 μ diam., ob papillas conoideas scabris; ascis 2-4-sporis; sporidiis 4-septatis, pallide brunneis, angustis, leniter constrictis, obtusis, 48-51 × 7-9.

Hab. in foliis Policoureae sp. plur. (Rubiaceae), Mayaguez, Piedras, alibique in Porto Rico. — Species notis variis facile dignoscenda.

187. **Meliola falcata** P. et H. Syd., Ann. Mycol. X, 1912, p. 37. — Am- 4529
phigena, plerumque epiphylla, velutina, atra, plagulas orbiculares 2-4 mm. latas saepe confluentes et tunc irregulares efformans; peritheciis intra setas myceliales numerosissimas absconditis, globosis, verrucosis, atris, 200-230 μ diam.; mycelio ex hyphis fuscis anastomosantibus, 6-7 μ cr., composito; hyphopodiis mucronatis oppositis 15-18 μ long., capitatis alternantibus 22-25 μ long. cellula apicali usque 10 μ lata; setis mycelicis simplicibus, curvatis, saepe falcatis, opacis 175-250 × 6-9; ascis 2-4-sporis; sporidiis oblongis, utrinque rotundatis, 4-septatis, constrictis, fuscis, 38-48 × 16-20.

Hab. in foliis Plectroniae ventosae (Rubiaceae), Ama-

nyimtote, Natal (E. M. Doidge).

188. **Meliola glabra** Berk. et Curt. — Syll. I p. 63.— var. **Psychotriae** Stevens, Meliola Porto Rico in Illin. biol. Monogr. II, 1916, p. 482. — Coloniis nunc minutis, mycelio mox ramoso et dense reticulato fere ut in typo, nunc magis extensis et laxis, a typo valde recedentibus. 4530

Hab. in foliis Psychotriae, Palicoureae, Coccocypseli (Rubiaceae), Porto Rico.

189. **Meliola bayamonensis** L. R. Tehon, Bot. Gazette, 67., 1919, p. 506.— Coloniis hypophyllis 2-5 mm. diam., mycelio laxe reticulato, ramulis alternis; hyphis obscuris 4 μ cr. undulatis; hyphopodiis capitatis alternis 30-60 μ inter se remotis, cellula apicali e globosa ovoidea 8-10 μ diam., basali variabili 6-16 μ longa; hyphopodiis mucronatis paucis, alternis, 14 μ long.; setis mycelicis nullis, perithecialibus 5-7, decumbentibus e obscure brunneis opacis, 225 × 4-5, apice acutis; peritheciis sparsis rugosis 100-135 μ; ascis mox evanidis sporidiis 4-septatis, 27-30 × 7, ad septa constrictulis. 4531

Hab. in Psychotria pubescenti (Rubiaceae), prope Bayamon, Porto Rico. — A *M. glabra* var. *Psychotriae* setis perithecialibus praesentibus, a *M. Psychotriae* Earle habitu et conformatione hyphopodiorum praecipue diversa.

190. **Meliola maquilingiana** Syd., Ann. Mycol. 15., 1917, p. 188.—Amphigena, saepius epiphylla plagulas tenues primitus minutas 2-3 mm. diam. dein plus minus effusas arachnoideas formans; mycelium rectangulariter ramosum, ex hyphis castaneo-brunneis 7-8 μ crassis rectis compositum; hyphopodia capitata modice copiosa, alternantia 15-18 μ longa, semper integra, cellula superiore globulosa vel ovata 10-12 μ lata, basali minuta, setae micelii modice copiosae, rectae, simplices, apice late rotundatae, 140-250 μ longae, 6-8 μ crassae, tota longitudine opacae vel rarius superne pellucidae; perithecia laxe aggregata, globosa, 140-170 μ diam. in sicco collapsa; asci 2-3 spori; sporae oblongo-cylindraceae, 4-septatae, vix vel leniter constrictae, utrinque rotundatae, 27-32 × 11-13, brunneae. 4532

Hab. in foliis Psychotriae spec. (Rubiaceae), Mt. Maquiling, Laguna, Ins. Philipp. (C. F. Baker).

191. **Meliola Bakeri** Syd., Ann. Mycol. 14., 1916 p. 355. — Amphigena vel ramulicola, plagulas minutas 1-3 mm. longas subvelutinas atras formans; mycelio denso, ex hyphis ramosis fuscis 7-10 μ crassis anastomosantibus composito; hyphopodiis capitatis copiosis, alternantibus vel oppositis, 16-22 μ longis, cellula superiore plerumque 4533

ovata vel ovato-globosa semper integra 8-11 μ lata, inferiore semper breviore; setis mycelicis copiosissimis, rectis vel subrectis apice lanceolato-acutis; aterrimis, tota longitudine opacis, 250-400 μ longis, basi 9-12 μ latis; peritheciis gregariis globosis, in sicco collapsis, parum tuberculatis, 160-200 μ diam.; ascis 2-3-sporis, fugacibus; sporidiis cylindraceis, 4-septatis, non vel parum constrictis, brunneis, utrinque rotundatis, 38-42 × 10-15.

Hab. in foliis Tetrastigmatis sp. (? Rubiaceae, an Vitaceae ?), M. Maquiling ins. Philipp. (C. F. Baker).

192. **Meliola anceps** Syd., Ann. Mycol. 14., 1916, p. 76. — Hypophylla, 4534
plagulas irregulares usque 1 cm. longas subinde confluentes atras formans; mycelio ex hyphis longis rectis vel rectiusculis fuscis 7-8 μ crassis composito; hyphopodiis capitatis alternantibus, 15-20 × 10-12, integris, late rotundatis, cellula basali brevi; hyphopodiis mucronatis non visis, setis mycelicis numerosis, praesertim perithecia circumdantibus, rectis vel leniter curvatis, 170-250 μ longis, 7-9 μ latis, atris, opacis, apicem versus dilutioribus et pellucidis, septatis, ad apicem plerumque late rotundatis vel lenissime etiam dilatatis, saepe etiam ad apice lenissime denticulatis vel potius verrucosis raro bifidis (dentibus brevibus usque 5 μ, rarissime longioribus); peritheciis sparsis, globosis, astomis, haud tuberculatis, 140-160 μ diam., ascis 2-3-sporis; sporidiis cylindraceis, late rotundatis, fuscis, 4-septatis, parum constrictis, 24-27 × 10-14.

Hab. in foliis Uncariae guyanensis (Rubiaceae), Seringal S. Francisco, Rio Acre, Brasiliae (E. Ule).

193. **Meliola Uncariae** Rehm, Ascomyc. Philipp. V, Leaflets of Phi- 4535
lipp. Botany VI (1914) p. 2192. — Maculis epiphyllis, sparsis, discoideis, distincte marginatis, tenuibus, nigritulis, 2-3 mm. latis, ex hyphis centrifugis, rectis, parce ramosis, brevicellularibus, fuscis, 6 μ latis contextis; hyphopodiis capitatis 2-cellularibus, brevissime stipitatis, 15-20 μ altis, cellula superiore ovoideo-globosa 12 μ lata, plerumque oppositis raro solitariis, itemque hyphopodiis uncinatis, 12 × 6-7, fuscis; setis nullis; peritheciis 2-5 in media parte macularum, atris, vix verruculosis, demum umbilicatis, glabris, 150 μ diam.; ascis ellipsoideis, bisporis; sporidiis oblongis, rectis, 4-septatis, utrinque rotundatis, non constrictis fuscis, 30 × 10-12.

Hab. ad folia Uncariae Perrottettii (Rubiaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (C. F. Baker).

194. **Meliola monensis** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 4536
1916, p. 506, fig. 35. — Coloniis plerumque epiphyllis atris, minu-

tis, 1-2 mm. latis, punctiformibus, mycelio densissime reticulato-contexto, hyphis ramosis, undulatis, 7 μ cr.; hyphopodiis capitatis alternis vel oppositis, crebris; cellulis mycelialibus 20 μ circ. longis; cellula capitata irregulariter lobata, 17 μ circ. diam., basilari 7 μ circ. longa; hyphopodiis mucronatis paucis, sparsis, alternis vel oppositis, phialiformibus, collo tenui, saepe curvulo, 20 μ longis; setis perithecialibus nullis, mycelialibus copiosis, rectis, rigidis, atris, simplicibus, 400 × 10-14, apice obtusis; peritheciis 250 μ diam., leniter scabris; ascis 78 × 38, mox diffluentibus; sporidiis 4-septatis, pallide brunneis, leniter constrictis, obtusis, 45-55 × 20-22.

Hab. in foliis Amyridis elemiferae (Rutaceae), Mona Island et Guayanilla, Porto Rico. — Species structura coloniarum et hyphopodiorum capit. perdistincta.

195. **Meliola citricola** Syd., Ann. Mycol. 15., 1917, p. 183.—Amphigena, 4537
plagulas primitus plus minus orbiculares 2-5 mm. diam. tandem saepe effusas et subinde totam folii superficiem obtegentes formans; mycelium ex hyphis valde ramosis opace brunneis 7-9 μ crassis septatis irregularibus subinde torulosis compositum; hyphopodia capitata numerosa, alternantia vel subinde opposita, plerumque oblonga, ovata vel piriformia 18-22 μ longa, cellula superiore 8-11 μ lata, semper integra, cellula basali minuta; hyphopodia mucronata etiam numerosa, opposita, 20-25 μ longa, acutata, basi 8-10 μ lata; setae myceliales numerosae, tota longitudine opacae, atrae, 500-700 μ longae, basi geniculatae et 10-12 μ crassae, rectae vel subrectae, ad apicem 2-4-denticulatae vel breviter furcatae, dentibus mox minutissimis, mox longioribus (usque 15 μ); perithecia sparsa, globosa, 130-160 μ diam., astoma; asci evanidi; sporae cylindraceae vel oblongae, utrinque rotundatae, 4-septatae, leniter constrictae, fuscae, 35-42 × 14-18, loculis fere aequalibus.

Hab. in foliis Citri prob. C. nobilis et Citri sp. (Rutaceae), San Antonio, Laguna et Rizal Luzon, Ins. Philipp. (Ramos et H. S. Yates).

196. **Meliola Harana** Trotter. — *Meliola citricola* K. Hara, Journ. A- 4538
gric. Soc. Shidzuoka Prefect. (« Shidzuokaken Nôkwaihô »), n. 263, 1919, p. 8, cum tab., nec Sydow — Tanaka, Mycologia, 12., 1920, p. 332. — Hyphis juvenilibus filiformibus tenuibus, ramosis, septatis hyalinis v. pallide coloratis, 2,5-3 μ cr., maturis crassioribus torulosis obscure brunneis, quandoque nucleatis 4-7 μ cr.; articulis seu chlamydosporis ellipsoideis v. subglobosis 8-15 × 4-7; conidiis Triposporiioideis stellatis 6-4 brachyatis 2-4 septatis, 40-60 μ cr.;

peritheciis globosis v. globoso-depressis, 200-230 μ cr., membrana nuda, subparenchymatica carbonacea fragili, obscure brunnea, cellulis 6-12 μ cr.; ostiolo apicali non prominente, orbiculari, 15-20 μ lato; ascis obovatis, globosis v. ellipsoideis, apice rotundatis, basi pedicellatis crasse tunicatis, octosporis aparaphysatis, 40-70 × 30-40; sporidiis ellipsoideis v. subfusoideis utrinque attenuatis rectis v. curvis 6-7 transverse septatis saepe etiam longitudinaliter, hyalinis 28-45 × 7-12. — Ob sporidia hyalina potius ad gen. *Limaciniam* adscribenda et tunc *Lim. Harana* Trott. vocanda.

Hab. in foliis, ramis fructibusque Citri sp. (Rutaceae), Shidzuoka-ken, Japonia.

197. **Meliola Butleri** Syd., in Syd. et Butl. Ann. Mycol. IX, 1911, p. 379. — Amphigena, plerumque epiphylla; mycelio rugoso-crustaceo, maculas orbiculares atras 2-4 mm. latas v. plagas effuso-confluentes formante; hyphis fusco-brunneis, 7-8 μ crassis; hyphopodiis capitatis oppositis v. alternantibus, 15-20 μ long., cellula superiore 9-10 μ cr., mucronatis oppositis et usque 20 μ long.; setis opacis, 200-500 μ long., 10-11 μ cr., ad apicem 2-4 furcatis; peritheciis numerosis, lenticulari-sphaeroideis, 150-220 μ diam.; ascis fugacibus, 2-sporis; sporidiis cylindraceis, utrinque rotundatis, quadriseptatis, leniter constrictis, fusco-brunneis, 33-40 × 13-17; mycelio conidiophoro velutino, ex hyphis erectis superne valde sinuosis (ut in *Meliola zig-zag*) composito; conidiis triseptatis, fusoideis, apice hyalino-papillatis vel attenuatis, 21-46 × 6-11. 4539

Hab. in foliis Citri medicae var. acidae (Rutaceae), Chittagong, Indiae or. (R. Sen), Citri decumanae, Kya-in Amherst Distr., Burma, Indiae or. (E. J. Butler). — A *M. amphitricha* setis furcatis imprimis diversa.

198. **Meliola Galipeae** Syd., Ann. Mycol. 15., 1917, p. 77. — Hypophylla, plagulas orbiculares, 3-8 mm. diam., atras, velutinas formans; mycelio ex hyphis obscure fuscis 8-9 μ crassis composito; hyphopodiis capitatis numerosissimis, 20-25 μ longis, 10-12 μ latis, integris cellula superiore ovata, inferiore brevi, setis mycelicis numerosissimis, rectis vel parum curvatis, basi saepe geniculatis, tota longitudine opacis vel ad apicem subpellucidis, 220-360 μ longis, 9-10 μ crassis, ad apicem 2-4-furcatis (dentibus erectis variabilibus 3-14 μ longis); peritheciis sparsis, globosis, astomis, tuberculatis, 250-300 μ diam.; ascis bisporis; sporidiis cylindraceis, utrinque obtusis, 4-septatis, parum constrictis, fuscis, 42-48 × 12-17, loculis subaequalibus. 4540

Hab. in foliis Galipeae longiflorae (Rutaceae), Seringal S. Francisco Rio Acre, Brasiliae (E. Ule).

199. **Meliola cadigensis** H. S. Yates, Philipp. Journ. Sc. Manila, XII (1917) p. 363. — Hypophylla, maculas atras 5-8 mm. diam., dein confluentes et plus minusve effusas efformans; mycelio ex hyphis septatis 6-7 μ diam. obscure brunneis composito, ramis oppositis vel irregularibus; hyphopodiis capitatis numerosis, oppositis vel irregularibus, cellula superiore rotundata, 12-14 μ longa, 10 μ lata, inferiore 5 μ longa; hyphopodiis mucronatis numerosis, ampulliformibus, usque ad 20 μ longis; setis mycelicis numerosissimis, erectis, ad basim geniculatis, 450-550 μ longis, 10 μ crassis, atris opacis; peritheciis numerosis in quaque macula, globosis, tuberculatis, 130-170 μ diam.; ascis non visis; sporidiis cylindraceis, utrinque late rotundatis, 4-septatis, ad septa constrictis, obscure brunneis, 35-40 μ longis, 14-16 μ latis. 4541

Hab. in foliis Glycósmis cochinchinensis (Rutaceae) Mt. Cading, Tayabas Prov. Luzon, Ins. Philipp.

200. **Meliola patens** Syd. in Leaflets of Philipp. Bot. V (1912) p. 1538. — Mycelio hypophyllo, plagulas velutinas, aterrimas, magnas, 1-2 cm. longas, discoideas vel irregulares saepeque confluentes efformante, ex hyphis varie ramosis et intertextis, obscure brunneis, 5-8 μ cr. composito; hyphopodiis capitatis alternis, bicellularibus, rectis vel curvulis, 16-22 × 10-12, cellula superiore ovoidea vel oblonga, rotundata, vix lobata; hyphopodiis mucronatis alternis vel oppositis, ca. 20-22 μ longis; setis mycelicis numerosissimis, rectis, erectis, rigidulis, 300 μ usque longis, 8-10 μ crassis, opacis, superne in ramos duos patentes longos (80-150 μ) leniter incurvatos divisis; ramis iterum semel vel bis in ramulos longiusculos (40-120 μ) ad apicem plus minusve longe 2-4-furcatos divisis; peritheciis globosis, rugosis, atris, 200-250 μ diam.; ascis bisporis mox diffluentibus; sporidiis oblongis, utrinque rotundatis, 4-septatis, ad septa constrictis, fusco-brunneis, 38-45 × 15-18. 4542

Hab. in foliis Lunasiae amarae (Rutaceae), Puerto Princesa, Palawan, ins. Philipp. — Affinis imprimis *M. leptideae* Syd.

201. **Meliola Pilocarpi** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 509. — Coloniis hypophyllis, irregularibus, 4-15 mm. diam., atris, mycelio laxe reticulato, ramis oppositis vel alternis, 8 μ diam.; hyphopodiis capitatis alternis, raro oppositis, non crebris, uno pro cellula, cellulis 20-30 μ longis, cellula capitata cylindrica vel leniter incrassata, 20 × 10, basilari brevi; hyphopodiis 4543

mucronatis plerumque oppositis, ampulliformibus, rostro saepe curvulo, 20 × 7; setis perithecialibus nullis, mycelialibus paucis, sparsis, rectis, atris, 1100 μ longis, basi 10 μ cr. apice acutatis; perithecis 190 μ diam.; ascis cito diffluentibus; sporidiis 4-septatis, brunneis, valde constrictis, obtusis, 51-54 × 17-20.

Hab. in foliis Pilocarpi racemosi (Rutaceae), Mayaguez, Porto Rico.

202. **Meliola Toddaliae** Doidge, Trans. R. Soc. South Afr. V, 1917, p. 732 et 746, t. 63, fig. 28. — Amphigena, maculas atras velutinas 2-3 mm. diam. efficiens; hyphis fuscis, ramosis 7-10 μ crassis, cellulis 18-25 μ longis, ramis plerumque oppositis, anastomosantibus, hyphopodiis capitatis numerosis, oppositis 18-20 μ long., stipitatis, cellula superiore subovata et leniter curvata, saepe compressa, 14-16 × 8-11; hyphopodiis mucronatis non numerosis, simplicibus, rectis demum opacis, plus minusve torulosis, 300-350 × 8-10; peritheciis sparsis, in setis mycelicis absconditis, atris, globulosis, verrucosis, 200-250 μ diam.; ascis 3-4-sporis; sporidiis 4-septatis, leniter constrictis, cylindricis, utrinque rotundatis, compressis, 47-55 × 18-21 × 14. 4544

Hab. in foliis Toddaliae lanceolatae (Rutaceae), Kentani, Africa austr. (A. Pagler).

203. **Meliola obesa** Speg. — Syll. IX p. 421. — Huc ducenda, teste ipso cl. Spegazzini (Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires. XXIII p. 43), *M. obesula* Speg. — Syll. XI p. 262 — quae tantum statum senescentem sistit. — In Rutaceis. 4545

204. **Meliola Champereiae** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 549. — Amphigena, plerumque hypophylla, plagulas minutas orbiculares 2-4 mm. latas aterrimas velutinas formans; mycelio ex hyphis dense intricato-ramosis fuscis 7-9 μ cr. composito; hyphopodiis capitatis numerosissimis, alternantibus v. saepe etiam perfecte oppositis, ovato-oblongis, 20-26 × 10-14, cellula superiore ovata rotundata vel rarius lenissime lobulata, inferiore brevi; hyphopodiis mucronatis raris; setis mycelicis numerosissimis, lanceolatis, apice acutis, rectis v. curvatis, 350-470 × 8-11, tota longitudine opacis, atris, crasse tunicatis; peritheciis parcis, globosis, astomis, 130-160 μ diam., ascis ovatis, bisporis; sporidiis oblongis v. oblongo-cylindraceis, utrinque late rotundatis, fuscis, 4-septatis, parum constrictis, 38-44 × 15-18. 4546

Hab. in foliis Champereiae manillanae (Santalaceae), Antipolo prov. Rizal, Ins. Philipp. (M. Ramos). — *Mel. stenosporae*

Wint. proxima.

205. **Meliola Exocarpi** H. S. Yates, The Philipp. Journ. of Sc., Bot. 13., 1918, p. 368 (*M. Exocarpiae*). — Amphigena, plagulas orbiculares, 2-8 mm. diam., atras formans; mycelio abundante, ex hyphis castaneis tortuosis anastomosantibus 6-8 μ diam. composito; hyphopodiis capitatis numerosis, alternantibus, cellula superiore globosa vel subglobosa et 18-22 μ diam., cellula inferiore 10-18 μ longa, 10-12 μ lata, hyphopodiis mucronatis rarissimis, irregularibus, ampulliformibus, usque ad 22-24 μ longis; setis mycelicis numerosis, rectis, erectis, atris, opacis, vel ad apicem brunneis, apicibus obtusis, 200-250 μ longis, 10-12 μ latis; peritheciis paucis, globosis, verrucosis, atris, opacis, 140-160 μ diam.; ascis non visis; sporidiis cylindraceis, utrinque late rotundatis, 4-septatis, ad septa constrictis, brunneis, 50-55 × 15-20. 4547

Hab. ad folia Exocarpi latifolii (Santalaceae), Prov. Llocos Norte, Luzon Ins. Philipp. (Ramos).

206. **Meliola Colladoi** Syd., Ann. Mycol. 18., 1920, p. 98. — Epiphylla, plagulas primitus minutas sed mox confluentes irregulares tenues formans; mycelium ex hyphis 7-9 μ crassis septatis ramosis compositum; hyphopodia capitata copiosa alternantia, oblonga, 14-18 μ longa, obtusa, integra, superne 7-9 μ lata; hyphopodia mucronata non visa; setae myceliales sat numerosae, rectae, simplices, pellucide brunneae, ad apicem obtusae, 4-6-septatae, 300-600 × 5-7; perithecia gregaria, 100-150 μ diam., in sicco collapsa; asci 2-3-spori; sporae oblongae, 4-septatae, vix vel leniter constrictae, utrinque obtusae, 26-34 × 10-12. 4548

Hab. in foliis Aryterae spec. (Sapindaceae), Mt. Maquiling, prov. Laguna Ins. Philippin. (T. Collado).

207. **Meliola Cupaniae** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 497, fig. 28. — Coloniis epiphyllis, irregularibus, 2-10 mm. diam., confluentibus, diffusis; mycelio plerumque opposite ramoso, laxissime intertexto, 7 μ crasso; hyphopodiis capitatis alternis, 37-70 μ inter se distantibus, cellula capitata ovato-cuneata, aequali vel angulosa, saepe truncata, basilari 7 μ longa; hyphopodiis mucronatis oppositis, ampulliformibus vel conoideis, 20 μ circ. longis; setis mycelialibus nullis, perithecialibus 3-12, rectis vel curvis, apice obtusis, fuscis, 140 × 5; peritheciis 110-170 μ diam., ob papillulas rotundatas scabris; ascis cito evanidis; sporidiis 4-septatis, brunneis, cylindraceis, leniter constrictis, obtusis, 37 × 14. 4549

Hab. in foliis Cupaniae americanae et Cup. sp. (Sapindaceae), Porto Rico. — Mycelio sparso, hyphopodiis distantibus, longis, angustis praecipue distincta species.

208. **Meliola araneosa** Syd. in Leaflets of Philipp. Bot. VI (1913), 4550
p. 1922. — Mycelio epiphyllo, maculas parum conspicuas, 2-7 mm. latas, saepe confluentes et totum folium occupantes formante, laxo, araneoso, ex hyphis elongatis parum ramosis, flexuosis, 4,5-6 μ cr. composito; hyphopodiis capitatis numerosis, alternantibus, continuis vel cellula brevissima stipitiformi plerumque vix conspicua suffultis, cellula superiore perfecte globosa vel subglobosa, 9-11 μ altis et latis, haud lobatis nec truncatis; hyphopodiis mucronatis alternis vel oppositis, lageniformibus vel subampulliformibus, 18-22 μ longis, rectis; setis mycelicis nullis; peritheciis laxe dispositis, globosis, 110-150 μ diam., in sicco collapsis, contextu e cellulis 9-11 μ longis composito, setulis paucis usque ad 100 μ longis, 8-9 μ crassis, 2-4-septatis, dilute fuscis, rectis vel subrectis, simplicibus, apice late rotundatis obsitis; ascis ovatis, 2-3-sporis; sporidiis oblongis, 4-septatis, ad septa constrictis, utrinque obtusis, fuscis, 35-38 × 11-15.

Hab. in foliis vetustis Guioae microcarpae (Sapindaceae), Cabadbaran, Mindanao, ins. Philipp. — *M. aciculosae* Wint. valde proxima sed hyphopodiis alienis.

209. **Meliola lepisanthea** Sacc., Notae Mycol. XXIII p. 61 (Accad. Ven.- 4551
Trent. 1917). — Plagulis epiphyllis, raro hypophyllis, irregularibus, confluentibus et maculas 1-3 cm. formantibus, ex olivaceo nigricantibus; hyphis radiantibus, ramosis, fuligineis, utrinque hyphopodiis capitatis typicis praeditis; hyphopodiis mucronatis non observatis; peritheciis globulosis, astomis, 90-110 μ diam., contextu fuligineo; sporidiis cylindraceis, utrinque rotundatis, 4-septato-constrictis, 30-38 × 10-11,5, badio-fuligineis; setis copiosis interspersis, cuspidatis, curvatis, 250-300 × 7, obsolete septatis aterrimis, basi saepe bulbillosis.

Hab. in foliis Lepisanthis sp. (Sapindaceae), Los Baños, Ins. Philipp. — Est e typo *Mel. amphitrichae* sed sporidia minora etc. Adest supra *Meliolam*, verisimiliter parasiticum, *Stemphylium muriculatum*, de quo cfr. suo loco.

210. **Meliola Hessii** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 4552
1916, p. 527, fig. 52. — Coloniis epiphyllis, irregulariter discoidalibus, 2-3 mm. diam., in senectute centro denudatis; mycelio rectiusculo, dense reticulato-contexto, ramis plerumque oppositis, 7 μ

diam.; hyphopodiis capitatis oppositis, crebris, 17 μ circ. inter se distantibus, cellula capitata piriformi 10 × 7, basilari 3 μ longa; hyphopodiis mucronatis oppositis, ampulliformibus; setis perithecialibus nullis, mycelialibus erectis, rigidis, non vere copiosis, sat uniformibus, 190 × 8, apice 1-2-3-dichotomo-ramosis, ramis brevibus, subrectangularibus, 15 μ circ. longis; perithecis 150 μ diam., minute scabris; ascis cito diffluentibus, 4-sporis; sporidiis 4-septatis, brunneis, leniter constrictis, obtusis, 41 × 14.

Hab. in foliis Paulliniae pinnatae (Sapindaceae), Sabano-Llana et Mayaguez, Porto Rico.

211. **Meliola Stevensii** Beeli, Bull. Jard. Bot. État Bruxelles, v. 7., 4553
1920, p. 98. — Amphigena, maculas orbiculares nigras velutinas 5-15 mm. diam. efformans; mycelio radianti, hyphis brunneis copiose ramosis, pallide brunneis, 30-36 × 7-8; hyphopodiis capitatis alternis v. unilateralibus 14-22 × 12, cellula superiori subgloboso-ovata, inferiori brevi; hyphopodiis mucronatis oppositis; setis mycelicis numerosis sparsis supra mycelium et sub peritheciis positis, brunneis pellucidis, rectis septatis simplicibus ad apicem obtusis, 240-300 × 5-6; peritheciis numerosis verrucosis atris, depresso-niduliformibus obscure brunneis, 150 μ diam., circa centrum macularum positis; ascis evanescentibus; sporidiis 4-septatis brunneis cylindraceis ad septa constrictulis, apice obtusis v. parum attenuatis, 34-35 × 12-15.

Hab. in foliis Sapindaceae cujusdam, Wombali, Congo, Africa trop. (VANDERYST). — Proxima *M. laxae* et *M. alienae*, sed differt maculis magnis regularibus, setulis pellucidis.

212. **Meliola Bomplandi** Speg., Mycet. Argent. VI, Anal. Mus. Nac. 4554
Buenos Aires XXIII p. 39 (1912). — Caespitulis saepius epiphyllis, irregulariter orbicularibus, 1-5 mm. diam., laxissime fibrillosis et siccando facillime deciduis, atris; hyphis laxe intertextis, repentibus, rectiusculis, 6-8 μ cr., subopace fuligineis, opposite ramosis, dense hyphopodiatis; bicellularibus, e cylindraceo subconicis, obtusis, oppositis, leniter antrorsis, 10-14 × 6-8, cellula supera conoidea et saepe subuncinato-incurva, opace fuliginea; peritheciis paucis, e globoso sublenticularibus 150-180 μ diam., glabris, papillulosis, astomis, non vel vix collabescentibus, coriacellis, atris, contextu opaco indistincto; ascis non visis; sporidiis ellipsoideis, utrinque leniter attenuatis rotundatisque, 28 × 18, quadriseptatis, ad septa modice constrictis, cellulis omnibus subaequalibus grosse 1-guttulatis, e latere leniter compressis, pallide fuligineis.

Hab. in foliis Sapindi saponariae (Sapindaceae), in nemoribus prope Bompland, Misiones: Argentina.

213. **Meliola Serjaniae** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 512, fig. 42. — Coloniis hypophyllis, irregularibus, atris, 1-6 mm. diam., hyphis 6 μ cr., irregulariter ramosis, laxe reticulato-contextis; hyphopodiis capitatis minutis, alternis vel irregularibus, 40-70 μ inter se distantibus, cellula capitata ovoidea vel piriformi et valde lobata, 17 × 10, basilari 3-6 μ longa; hyphopodiis mucronatis plerumque copiosioribus, oppositis, e ampulliformibus conoideis, angustis, 24 × 6; setis perithecialibus nullis; mycelialibus copiosis, rectis vel leniter curvis, ubique atris, apice abrupte acutatis, 280-800 × 10; peritheciis 150-190 μ diam.; ascis mox evanidis; sporidiis 4-septatis, brunneis, constrictis, obtusis, 41 × 17. 4555

Hab. in foliis Serjaniae polyphyllae (Sapindaceae), Porto Rico. — A caeteris speciebus in Sapindaceis plane recedens.

214. **Meliola Dipholidis** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 512. — Coloniis amphigenis, irregulariter circularibus, 2-5 mm. diam.; mycelio atro, ramis plerumque oppositis, laxe contexto, 7 μ crassis; hyphopodiis capitatis minutis, alternis vel irregulariter sparsis, non crebris, uno pro cellula, cellulis 27 μ circ. longis, cellula capitata obovoidea, piriformi vel globulosa, saepe angulosa vel curvata, 17 × 10, basilari 5-7 μ longa; hyphopodiis mucronatis alternis vel oppositis e cuneatis ampulliformibus, 18 × 7; setis perithecialibus nullis, mycelialibus paucis, rectis vel leniter curvis, 400 × 7, ubique fuscis, apice acutis; peritheciis 110-150 μ diam., tenuiter scabris; ascis bisporis, mox evanescentibus; sporidiis 4-septatis, brunneis, cylindraceo-ellipsoideis, medio incrassatis, ad septa valde constrictis, obtusis, 41-44 × 18. 4556

Hab. in foliis Dipholidis salicifoliae (Sapotaceae), Guayanilla et Quebradillas, Porto Rico. — A *M. amphitricha* differt hyphopodiis capitatis sporidiisque alienis, a *M. brasiliensi* characteribus sporidiorum et setarum.

215. **Meliola Lucumae** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 517, fig. 47. — Coloniis amphigenis, in hypophyllo latioribus, irregulariter circularibus, 2-10 mm. diam., diffusis; mycelio laxe reticulato-contexto, hyphis 7 μ cr., plerumque opposite ramoso; hyphopodiis capitatis alternis, distantibus, uno in quaque cellula, cellulis 35 μ circ. longis, cellula capitata cylindrica vel utrinque leniter attenuata, 17 × 7, basilari 3 μ longa; hyphopodiis mucro- 4557

natis paucis, plerumque oppositis, subconicis, circ. 20 × 4; setis perithecialibus nullis, mycelialibus paucis, leniter curvis, 200-800 × 7, ubique fuscis, apice obtusis; peritheciis 100-150 μ diam., ob papillulas rotundatas scabris; ascis mox evanidis; sporidiis 4-septatis, pallide brunneis, leniter constrictis, obtusis, 44 × 18.

Hab. in foliis Lucumae multiflorae (Sapotaceae), Las Marias, Porto Rico. — Mycelio sparso, diffuso, hyphopodiis capit. cylindraceis, mucronatis parum distinctis consociatis distinguenda species.

216. **Meliola Peglerae** Doidge, Trans. R. Soc. Soyth. Afr. V, 1917, p. 730, t. 63 f. 24. — Epiphylla, subcrustacea, nigra, colonias orbiculares 1-3 mm. diam., interdum confluentes formans; hyphis septatis ex cellulis 8-14 × 7-9 umbrinis formatis, ramulis anastomoticis; hyphopodiis capitatis numerosis alternis v. unilateralibus, breviter stipitatis, cellulis basalibus 7 × 4-7, terminalibus obovoideis, saepe curvis, 14-18 × 7-11; hyphopodiis mucronatis paucis oppositis, ampulliformibus 14-22 × 7; setis mycelialibus nullis; peritheciis in centro coloniae confertis, nigris 126-233 μ diam, cellulis superficiei mamillatis; ascis 2-4-sporis, evanidis; sporidiis oblongis utrinque rotundatis, 4-septatis, ad septa leniter constrictis, 29-43 × 16-18. 4558

Hab. in foliis Anastiabes integerrimae (Scrophulariaceae), et fruticis indeterminati, Kentani et pr. Durban, Africae austr. (A. Pegler et Wood).

217. **Meliola capsicicola** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p, 509, fig. 39. — Coloniis amphigenis, circularibus, 1-3 mm. diam., atris; mycelio densissime reticulato contexto, hyphis 7 μ crassis, sinuosis, irregulariter ramosis; hyphopodiis capitatis alternis, non crebris, uno pro cellula, cellulis 20-30 μ longis, cellula capitata forma et magnitudine irregularissima, basilari saepe elongata; hyphopodiis mucronatis paucis, sparsis, phialiformibus, irregularibus, 20 × 7; setis perithecialibus nullis, mycelialibus copiosis, rectis vel leniter curvis, 265 × 10, apice acutis, ubique fuscis; peritheciis 170 μ diam., scabriusculis; ascis cito diffluentibus; sporidiis 4-septatis, brunneis, leniter constrictis, obtusis, 41 × 14. 4559

Hab. in foliis caulibusque Capsici baccati (Solanaceae), Manati et Dos Bocas, Porto Rico. — Species praecipue ob irregularitatem hyphopodiorum eximie distincta.

218. **Meliola Cestri** L. R. Tehon, Bot. Gazette, 67., 1919, p. 505. — Coloniis epiphyllis irregulariter circularibus 1-3 mm. diam.; mycelio obscuro, dense reticulato, hyphis 9-10 μ cr. formato; hypho- 4560

podiis capitatis oppositis, phyalaeformibus 24-28 × 9 ; setulis perithecialibus nullis, mycelialibus numerosis, rectis, nigris, 650-850 × 10-11, apice obtusis ; peritheciis numerosis, centro aggregatis, juventute corona hypharum circumdatis, levibus, 225-275 μ diam. ; ascis mox evanidis ; sporidiis 4-septatis, obscure brunneis, cylindraceis 50-55 × 18-20, maturis ad septa constrictis.

Hab. in foliis Cestri sp. (Solanaceae), Mayaguez, Porto Rico. — A *M. Gesnerii* Stev. quaque in Cestro omnino diversa.

219. **Meliola Henningsii** Beeli, Bull. Jard. Bot. État Bruxelles, v. 7., 456
1920, p. 100. — Ita vocanda est *Mel. solanicola* Henn. 1900 non Gail 1892.

220. **Meliola Solani** Stevens, Mel. Porto Rico in Illin. Biol. Monogr. 456
II, 1916, p. 15, fig. 7. — Coloniis amphigenis, irregulariter circularibus, 2-4 mm. diam. ; mycelio atro, dense reticulato, 7 μ diam., irregulariter ramoso ; hyphopodiis capitatis minutis, plerumque oppositis, haud crebris, in quaque cellula binis, cellulis 17 μ circ. longis ; cellula capitata pyriformi vel globulosa 10 × 8, basilari brevi ; hyphopodiis mucronatis paucis, alternis vel oppositis, ampulliformibus, 14 × 7 ; setis mycelialibus nullis, perithecialibus paucis vel nullis, rectis vel leviter incurvis, 125 × 7, obtusis, atris ; peritheciis, 150-180 μ diam. ; ascis mox evanidis ; sporidiis 4-septatis, brunneis, lenissime constrictis, obtusis, 37 × 14.

Hab. in foliis Solani jamaicensis (Solanaceae), Monte d' Oro, Porto Rico. — Hyphopodiis capitatis minutis, subglobosis, saepius oppositis praecipue distincta.

221. **Meliola laeta** Theiss., Broteria, Bot., v. XII, 1914, fasc. I, p. 24, 456
fig. 3. — Plagulae dense sparsae, 2-3 mm. latae, opace nigrae. Hyphae mycelii alterne ramosae, graciles, 5,5-6,5 μ crassae, fuliginellae, glaberrimae, cellulis elongatis, 30-35 μ longis, setae nullae. Hyphopodia capitata concolora, pedicello cylindrico brevissimo (3-4 μ), capitulo ovato vel globoso integro recto 10-12 μ lato ; hyphopodia mucronata alterna, saepe geminata, ampulliformia, curvata. Perithecia 220 μ diam., applanato-globosa, nigra, verrucosa, e cellulis magnis angulosis ca. 22 μ latis contexta (cellulae fuligineae, membrana exteriore nigra et crassiore, circa pseudo ostiolum subconcentrice ordinatae). Asci bispori 55 × 25. Sporae brunneae, cylindraceae, rectae, rarius curvulae, 4-septatae, leniter ad septa constrictae, 48 × 17, cellulis aequalibus.

Hab. epiphylla in foliis Solani (?) sp. (Solanaceae), S. Leopoldo, Brasiliae meridionalis (J. Rick).

222. **Meliola oligomera** Syd., Ann. Mycol. 15.,1917, p. 190.—Amphigena, plerumque epiphylla, pelliculosa, leniter velutina, aterrima, plagulas irregulares tandem confluentes et plus minus effusas saepe totam folii superficiem occupantes formans; mycelium ex hyphis dense intértextis copiose ramosis anastomasantibusque castaneo-brunneis 6-8 μ crassis septatis formatum; hyphopodia capitata numerosissima, irregularia, alternantia, 20-25 μ longa, cellula superiore semper valde irregulariterque lobata et 10-18 μ lata, inferiore stipitiformi anguste cylindracea; hyphopodia mucronata rara, setae myceliales copiosae, rectae vel subrectae, tota superficie opacae, simplices, ad apicem acutatae 200-250 μ longae, ad basim 8-10 μ crassae; perithecia gregaria, globosa, in sicco collapsa 150-200 μ diam.; asci mox diffluentes; sporae cylindraceae 3-septatae, leniter constrictae, utrinque rotundatae, cellulis fere aequalibus, 40-44 × 12-14, castaneo-brunneae, in maturitate subopacae. 4564

Hab. in foliis Turpiniae sp. (? Staphyleaceae), Rizal, Luzon Ins. Philipp. (M. Ramos).

223. **Meliola styracicola** Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires XXIII p. 44 (1912). — Caespitulis orbicularibus, evanescentibus, 3-10 mm. diam., amphigenis, arcte adnatis, non deciduis, parcissime setulosis; hyphis repentibus circa perithecia alterne geniculato-denticulatis ut in *M. zig-zag*, ceteris irregulariter ramosis, 6-8 μ cr.; hyphopodiis paucis, alternis, lageniformibus vel conoideis; setulis erectis, 100-200 × 5-8, opace fuligineis, fragilibus, subdeciduis, apice integris et conidium fusoideum 3-septatum vel 4-5-blastum 30-40 × 8-9, olivaceum gerentibus; peritheciis globosis, glabris, subcarbonaceis, astomis, non collabentibus, 150-250 μ diam., grosse verrucosis; ascis ovatis, 2-3-sporis, mox diffluentibus; sporidiis subfusoideis vel cylindraceo-ellipsoideis, e latere compressis, 58-60 × 20-24 × 16-18, 4-septatis, vix constrictis, opace fuligineis, loculo centrali conspicue majore. 4565

Hab. in foliis vivis Styracis leprosae (Styracaceae), in silvis prope Puerto Leòn, Misiones: Argentina.

224. **Meliola Celtidiae** H. S. Yates, The Philipp. Journ. of Sc., Bot., 13., 1918, p. 367. — Hypophylla, atra, velutina, maculas orbiculares, 1-2 cm. diam. efformans; mycelio ex hyphis brunneis septatis tortuosis anastomosantibus radiantibus 10-12 μ crassis composito; hyphopodiis capitatis numerosis, alternantibus, cellula superiore globosa, 15-18 μ diam. vel lobata et 12-20 μ longa, 10-25 μ lata; hyphopodiis mucronatis numerosis, irregularibus, ampulliform- 4566

mibus, usque ad 20-30 μ longis; setis rectis, erectis, ad basim geniculatis, 800-1200 μ longis, 20-25 μ crassis, atris, opacis, obtusis; peritheciis numerosis, atris, opacis, tuberculatis, globosis vel applanatis, 175-225 μ diam.; ascis evanescentibus; sporidiis obscure fuscis, oblongis, utrinque rotundatis, 4-septatis, ad septa constrictis, 50-55 × 15-20.

Hab. ad folia Celtidis luzonensis (Ulmaceae), Catubig River Samar, Ins. Philipp. (Ramos).

225. **Meliola celticola** H. S. Yates, The Philipp. Journ. of Sc., Bot., 4567
13., 1918, p. 366. — Amphigena, maculas atras, pelliculosas, orbiculares, 2-4 mm. diam., vel confluentes efformans; mycelio ex hyphis dense intertextis brunneis 7-8 μ cr. ramosis et anastomosantibus composito; hyphopodiis capitatis numerosis, alternantibus, cellula superiore angulata vel irregulari, 20-25 μ diam., cellula inferiore 10 μ longa, 4-5 μ lata; hyphopodiis mucronatis numerosis, plerumque alternantibus, ampulliformibus, 20-30 μ longis; setis mycelicis paucis, atris, opacis, ad apicem uncinatis, acutis, rarius obtusis 250-350 μ longis, 6 μ crassis, peritheciis numerosis, globulosis, atris, verrucosis, 159-225 μ diam.; ascis bisporis, evanescentibus; sporidiis cylindraceis, castaneo-brunneis, 4-septatis, ad septa constrictis, utrinque late rotundatis, 45-50 × 17-19,

Hab. ad folia Celtidis philippinensis (Ulmaceae), Bangui, Prov. Llocos Norte, Luzon, Ins. Philipp. (Ramos).

226. **Meliola Tremae** Speg., Mycet. Argent. VI, Anal. Mus. Nac. Bue- 4568
nos Aires, XXIII p. 45 (1912). — Caespitulis amphigenis, saepius epiphyllis, orbicularibus vel confluenti-difformibus, 1-5 mm. diam., arcte adnatis, non deciduis, atris, tenuiter membranaceo-araneosis; hyphis repentibus irregulariter intertextis, rectiusculis, 8-10 μ cr., fuligineis, opposite ramosis; hyphopodiis laxis, saepius alternis, clavulatis vel sublageniformibus, 20-25 × 12-14, subopacis; setis nullis; peritheciis gregariis, subhemisphaericis, astomis, basi subapplanatis, grosse verrucosis, 150-200 μ diam.; ascis ellipsoideis, 60-65 × 20-25, bisporis, mox diffluentibus; sporidiis e latere subellipticis, e fronte cylindraceis, 4-septatis, vix constrictis; 40-44 × 16-18, primo tunica mucosa tenui obvolutis, fuligineis, serius nudis, atro-opacis, loculo centrali nonnihil majore.

Hab. in foliis vivis Tremae micranthae (Ulmaceae), in silvis prope Puerto Leòn, Misiones: Argentina.

227. **Meliola Leucosykes** A. S. Yates, Philipp. Journ. Sc. Manila, XII 4569
(1917) p. 366 (*M. Leucosykeae*). — Epiphylla, plagulas atras, orbi-

culares, 4-8 mm. diam. formans; mycelio sparso, ramis oppositis vel irregularibus, ex hyphis brunneis, septatis 7-8 μ latis composito; hyphopodiis capitatis numerosis, alternantibus, cellula superiore sub globosa, 10 μ longa, 12-14 μ lata; cellula inferiore 5 μ longa; hyphopodiis mucronatis paucis, ampulliformibus, 10-15 × 4-7; setis mycelicis numerosis 300 μ longis, ad basim ad 8 μ latis, erectis, rectis vel leviter curvatis, inferne atris, opacis, apicem versus dilutiorem brunneis, obtusis; peritheciis globosis, 230-260 μ diam., tuberculatis, ascis oblongis, 60-70 × 25-30, 6-8 sporis; sporidiis 3-septatis ad septa non constrictis, utrinque late rotundatis, fuscis, 35-40 μ longis, 14-16 μ latis.

Hab. in foliis Leucosykes capitellatae (Urticaceae), Catubing River, Samer Ins. Philipp.

228. **Meliola Earlii** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 515, fig. 45. — Coloniis amphigenis, irregularibus, 1-4 mm. diam., hyphis undulatis, irregulariter ramosis, saepe ad hyphopodia angulatis, 6 μ diam., laxe reticulato-contextis; hyphopodiis capitatis minutis, alternis, non confertis, 25 μ circ. inter se distantibus, ovatis vel piriformibus, interdum angularibus vel curvis, 10 × 8, cellula basilari brevi; hyphopodiis mucronatis paucis, ampulliformibus; setis perithecialibus nullis, mycelialibus paucis vel copiosis, 160 μ circ. longis, rectis vel leniter curvis, opacis, apice acutis; peritheciis 160 μ diam., scabris ob papillulas rotundatas, non ostiolatis; ascis mox evanidis; sporidiis 4-septatis, brunneis, subconstrictis, obtusis, 35-40 × 10. 4570

Hab. in foliis Pileae sp. (Urticaceae), Porto Rico — Socia adest *M. triloba*, a qua tamen species haec facile dignoscitur.

229. **Meliola sepulta** Pat. ap. Stevens, Mel. Porto Rico in Illin. biol. Monogr. II, 1916 p. 482, fig. 5. — Coloniis circularibus, 1-7 mm. diam., atris, densis, plerumque hypophyllis, mycelio crebre ramoso-reticulato; hyphopodiis capitatis, 24 × 14, oppositis vel alternis, cellula capitata augulari vel saepe distincte lobata, basilari 10 μ longa; setis mycelialibus et perithecialibus nullis; peritheciis in partibus coloniae vetustioribus copiosis, 170 μ diam., tenuiter scabris; ascis evanidis, brevibus, crassis, 2-4-sporis; sporidiis 52 × 20, 4-septatis, valde constrictis, utrinque obtusis. 4571

Hab. in foliis Avicenniae nitidae (Verbenaceae), Porto Rico.

230. **Meliola vilis** Syd. in Leaflets of Philipp. Bot. VI (1913) p. 1926.— Mycelio epiphyllo, effuso, tenuissimo, parce conspicuo, ex hyphis 4572

longiusculis, ramosis, fuscis, 6-8 μ crassis composito; hyphopodiis capitatis alternantibus, bicellularibus, apice obtusis, 18-24 × 10-12; hyphopodiis mucronatis oppositis 18-25 μ longis; setis nullis; peritheciis sparsis, globosis, 80-130 μ diam., rugulosis, atris; ascis ovatis, 2-3-sporis; sporidiis oblongis, utrinque obtusis, 4-septatis, ad septa constrictis, fuscis, 34-40 × 13-16.

Hab. in foliis vetustis Callicarpae Blancoi (Verbenaceae), Cabadbaran, Mindanao, ins. Philipp. — A *M. Callicarpae* Syd. recedit setarum defectu, hyphopodiis non oppositis et sporidiis latioribus.

231. **Meliola Callicarpae** P. et H. Syd., Ann. Mycol. X, 1912, p. 80.— 4573
Mycelio epiphyllo, laxo, ex hyphis repentibus fuscis 5-6 μ cr. composito; hyphopodiis oppositis v. alternantibus, sessilibus, oblongis 9-13 μ long.; setulis mycelii erectis, rectis, septatis, simplicibus, usque 400 μ long. 9-10 μ cr.; peritheciis globosis, tuberculatis, atris, 90-120 μ diam.; ascis 30-45 × 20-30, 2-4-sporis; sporidiis oblongis, utrinque rotundatis, 4-septatis, constrictis, fuscis, 28-32 × 9-11.

Hab. in foliis Callicarpae canae (Verbenaceae), prope Manila, Ins. Philippin. (E. D. Merrill).

232. **Meliola sakawensis** Henn.—Syll. XVII, p. 548 — var. **longispora** 4574
Beeli, Bull. Jard. Bot. État Bruxelles, v. 7., 1920, p. 98. — A typo differt setis mycelicis 250-300 × 8, sporidiis majoribus 36-38 × 14.

Hab. epiphylla in foliis Clerodendri sp. (Verbenaceae), Wombali, Congo, Africae trop. (Vanderyst).

233. **Meliola micromera** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 552.— 4575
Amphigena, plagulas tenuissimas effusas parum perspicuas formans; mycelio ex hyphis subrectis v. flexuosis subinde subtorulosis 6-8 μ cr. composito; hyphopodiis capitatis numerosis, alternantibus, 12-16 μ long. 9-10 μ latis, cellula superiore rotundata ovata v. ovato-globosa; hyphopodiis mucronatis raris; setis mycelicis sparsis haud numerosis, brevibus, 150-200 × 6-7, apice semper obtusis, subrectis, flexuosis v. varie curvatis, saepe subfalcatis, obscure brunneis, subpellucidis usque opacis, crasse tunicatis; peritheciis sparsis, globosis, astomis, 100-150 μ diam.; ascis ovatis, 2-4-sporis; sporidiis breviter cylindraceis, utrinque obtusis, 4-septatis, non v. parum constrictis, sordide fuscis, 25-28 × 10-13.

Hab. in foliis Gmelinae philippinensis (Verbenaceae), Angat prov. Bulcan, Ins. Philippin. (M. Ramos).

234. **Meliola Lantanae** Syd. ap. Fuhrmann et Mayor, Voy. Expl. scient. 4576
Colombie, in Mém. Soc. neuchât. Sc. Nat. V p. 434 (1913). — My-

celio amphigeno, maculas orbiculares vel irregulares, 1-3 mm. latas, tenues, saepe confluentes, modice manifestas efficiente, ex hyphis dense intertextis anastomosantibusque, subtorulosis, obscure fuscis, 7-10 μ cr. composito; hyphopodiis capitatis modice copiosis, plus minus longe stipitatis, totis 20-28 μ longis, 9-12 μ latis, cellula superiore ovata vel ovato-globosa; hyphopodiis mucronatis raris, 20 μ usque longis; setis mycelicis sparsis, rectis, erectis, rigidis, apice obtusis, septatis, usque ad 450 μ longis, 6-8 μ cr., inferne saepe opacis, superne translucidis; peritheciis globosis, astomis, tuberculatis, atris, minutis, 80-200 μ diam., in sicco collapsis; ascis ovatis, 40-45 × 10-25, bisporis; sporidiis oblongis, 4-septatis, ad septa constrictis, utrinque rotundatis, fuscis, 34-40 × 10-14.

Hab. in foliis Lantanae hispidae (Verbenaceae), in regione andina prope Angelopolis, Columbia, alt. 1600-2000 m. — Affinis *M. ambiguae* a qua differt praecipue peritheciis minoribus, et *M. microsporae* a qua sporidiis et hyphopodiis capitatis majoribus recedit.

235. **Meliola callista** Rehm, Ascomyc. Philipp. V, Leaflets of Philipp. 4577
Botany VI (1914) p. 2191. — Mycelio epiphyllo plagas circulares arachnoideas, 8-10 mm. latas, demum confluentes, nigridulas efformante, ex hyphis parce ramosis, septatis, 5-6 μ cr. efformato; hyphopodiis capitatis sparsis, alternis, 2-cellularibus, cellula inferiore cylindracea, superiore globulosa, interdum recurvata, 20-25 × 12, hyphopodiis mucronatis nonnullis 12 × 7; setis mycelialibus paucis, erectis, obtusis, 200 × 5-6; peritheciis in centro mycelii sparsis, globosis, astomis, nigris, glabris, 200 μ diam. levibus, exappendiculatis; ascis primo cylindraceis 80-100 × 18, dein ovatis 80 × 35, octosporis; paraphysibus ramosulis, septatis, 4 μ cr.; sporidiis distichis, subclavatis, utrinque obtusis, 3-septatis, non constrictis, fuscis, 30-35 × 12-14. — Mycelium obsessum filamentis erectis, crassis, nigris, 2 mm. usque altis, ad basim circ. 50 μ latis, ex hyphis parallelis, fuscis, septatis, 0,4 μ circ., arcte conglutinatis contextis, supra medium filamenti sensim ramose secedentibus, ad apicem plane dissolutis, obtusis, plerumque recurvatis, dilutioribus, conidium gerentibus. Conidia fusiformia, obtusa, flavo-fusca, 4-6-septata, non constricta, in pedicellum elongata, 45-50 × 8-9.

Hab. ad folia Premnae odoratae (Verbenaceae), Luzon, Prov. Laguna, Los Baños (S. A. Reyes).

236. **Meliola aciculosa** Wint. — Syll. IX p. 421. — var. **Viticis** Rehm, 4578
Ascomyc. Philipp. VI, Leaflets of Philipp. Botany, VI (1914) p. 2257.

A typo recedit tantum mycelio obscure fusco arcte compresso.

Hab. ad folia Viticis Negundinis (Verbenaceae), Los Baños, ins. Philipp. (S. A. Reyes).

237. **Meliola rizalensis** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 551.— 4579
Plerumque epiphylla, indeterminata, confluens, saepe totam folii superficiem irregulariter occupans, subpelliculosa; mycelio ex hyphis castaneo-brunneis fere rectangulariter ramosis 7-9 μ cr. composito; hyphopodiis capitatis numerosis, alternantibus integris, 12-18 × 10-12, cellula superiore globulosa v. late ovata, inferiore brevi v. brevissima; hyphopodiis mucronatis non visis; setis mycelicis perraris, castaneo-brunneis, subopacis, ad apicem obtusis, simplicibus, rectis, 100-175 × 6-9; peritheciis dense sparsis, globosis, minute ostiolatis, haud tuberculatis, 130-160 μ diam.; ascis ovatis, 2-3 sporis; sporidiis ellipsoideo-oblongis v. oblongis, 4-septatis, parum constrictis, castaneo-brunneis, 26-36 × 10-15.

Hab. in foliis Viticis parviflorae (Verbenaceae), Antipolo prov. Rizal, Ins. Philippin. (M. Ramos).

238. **Meliola macrochaeta** Syd. in Leaflets of Philipp. Bot. V (1912) 4580
p. 1538. — Mycelio hypophyllo, tenuissimo, effuso, plagulas tenues, discoideas vel subdiscoideas, 0,5-1,5 cm. latas, subinde confluentes efformante; hyphis longissimis, 8-10 μ crassis, remote septatis, laxe ramosis (ramis plerumque longiusculis) obscure brunneis composito; hyphopodiis mucronatis alternis vel oppositis, e basi lata apicem versus acute tenuatis, 22-38 μ longis, basi 8-10 μ cr., fuscis; hyphopodiis capitatis alternis, clavatis, rectis vel curvulis, distincte 3-5 cellularibus, 30-40 × 14-18; setis mycelicis nullis; setis perithecialibus longissimis, usque ad 900 μ, 11-16 μ crassis, atris, opacis, rigidis, apice bidentatis, dentibus usque ad 15 μ longis; peritheciis in mycelio sparsis, depresso-globosis, valde rugosis, atris, 175-225 μ diam.; ascis late ovatis, bisporis, mox diffluentibus; sporidiis oblongis, utrinque late rotundatis, 4-septatis, ad septa constrictis, 45-52 × 16-18, obscure brunneis.

Hab. in foliis vetustis Alsodeiae formicariae (Violaceae), Puerto Princesa, Palawan, ins. Philipp. — Setis perithecialibus perlongis et hyphopodiis majusculis pluricellularibus eximie distincta.

239. **Meliola Merrillii** Syd., Enum. Philipp. Fungi II, in Philipp. Journ. 458
of Sci. VIII (1913) p. 479. — Epiphylla, subpelliculosa, atra, velutina, primitus maculas 2-8 mm. diam. formans, dein confluens et plus minusve effusa; mycelio ramoso, anastomosante, fusco-brun-

neo, ex hyphis septatis 8-10 μ crassis composito ; hyphopodiis capitatis numerosis, alternis, 20-26 μ longis, cellula basali brevi, superiore globulosa vel lenissime lobata, crassa, 11-14 μ lata ; hyphopodiis mucronatis rarioribus, oppositis, ampulliformibus, usque ad 24 μ longis ; setis mycelicis numerosissimis, erectis, basi geniculatis, 160-220 × 9-11, septatis, opacis vel subopacis, superne in ramos duos patentes, 35-70 μ longos divisis, ramis ad apicem sive tantum bi-tridentatis, dentibus 3-10 μ longis, sive rarius iterum in ramulos duos divisis et ramulis his ad apicem breviter 2-3-dentatis; peritheciis sparsis, globosis, levibus, 140 175 μ diam. ; ascis ovatis 2-3-sporis, fugacibus ; sporidiis oblongis, 4-septatis, ad septa constrictis, fuscis, utrinque late rotundatis, 34-38 × 12-14.

Hab. in foliis vivis Cissi? adnatae (Vitaceae), Luzon, Prov. Laguna, Mt. Maquiling, ins. Philipp. (Merrill). — Affinis *M. patenti* Syd. a qua differt habitu alieno, peritheciis minoribus non rugosis sporidiisque augustioribus.

240. **Meliola varia** Doidge, Trans. R. Soc. South. Afr. V, p. 738 et 747, t. 65 fig. 40. — Amphigena, plagulas minutas, atras, 1-2 mm. diam., efficiens ; hyphis sinuatis, irregulariter 7-9 μ crassis, brunneis, cellulis 18-25 μ long., compositis ; ramis plerumque alternis v. unilateralibus ; hyphopodiis capitatis remotis, non numerosis, alternis v. unilateralibus, 21-35 μ long., cellula superiore ovato-globosa 14-15 × 10,5-12 ; hyphopodiis mucronatis rarissimis, pallidioribus ca. 11 × 5-6 ; setis mycelicis numerosis, 180-226 μ longis erectis, rigidis, stipite opaco, simplice, 160-190 × 10 ; superne ramosis, pellucidis, aliis in ramos ternos breves (ca. 18 μ) apice bifurcatos divisis, aliis in ramos duos (18-30 × 8) patentes divisis, ramis iterum in ramulos duos v. ternos, globosis, in sicco leniter collapsis, verrucosis, 160-180 μ diam., ascis non vivis ; sporidiis 4-septatis, ad septa vix constrictis, cylindricis utrinque rotundatis, 45-50 × 15-18. 4582

Hab. in foliis Cissi rhomboideae (Vitaceae), Winter's Kloof, Natal, Africa austr. (E. M. Doidge).

241. **Meliola amomicola** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 508, fig. 37. — Coloniis plerumque hypophyllis, atris, circularibus vel irregularibus, diffusis, 5-15 mm. diam. ; mycelio sat dense contexto, subcompacto, ex atro pallide stramineo, ramis utplurimum oppositis, 6 μ crassis ; hyphopodiis capitatis plerumque oppositis, binis in quaque cellula, cellulis 24 μ circ. longis ; cellula capitata cylindrica, recta vel curva, basilaris vix crassiore, 4583

cellula basilari 2-4 μ longa; hyphopodiis mucronatis sparsis, ampulliformibus, 24 × 6; setis perithecialibus nullis, mycelialibus sparsis, longis, 900-1000 × 10, basi incrassatis, ubique atris, acutis; peritheciis sparsis, 180 μ diam.; sporidiis 15 × 17, valde constrictis, obtusis.

Hab. in foliis Amomi caryophyllatae (Zingiberaceae), Mayaguez, Porto Rico.

242. **Meliola aibonitensis** Stev., Mel. Porto Rico in Ill. Biol. Monogr. II, 1916, p. 484. — Coloniis amphigenis, atris, circularibus dein irregularibus, 1-3 mm. diam.; mycelio densiuscule contexto, contorto, undulato, irregulariter ramoso; hyphopodiis capitatis alternis vel unilateralibus, inter se sat proximis, saepe 17 μ, cellula capitata subglobulosa, 10-15 μ diam., basilari brevi; hyphopodiis mucronatis sparsis, e ampulliformibus conicis; setis mycelialibus et perithecialibus nullis; peritheciis in juventute saepeque etiam in maturitate applanatis, areola myceliali radiatim cinctis, scabriusculis, 140 μ diam.; sporidiis 4-septatis, 14 × 17, obtusis, leniter constrictis. 4584

Hab. in foliis Dicotyledoneae quaedam haud determinatae, Aibonito, Porto Rico.

243. **Meliola leopoldina** Theiss., Broteria, Bot., v. XII, 1914, fasc. I, p. 25. — Plagulae myceliales epiphyllae, minutae, 2 mm. diam., opacae; peritheciis paucis. Hyphae mycelii opposite vel alterne ramosae, cellulis elongatis 40 μ. Hyphopodia capitata opposita, 16-20 × 10, cylindraceo-clavata pedicello brevissimo, capitulo subclavato, integro, saepe fere cylindraceo. Setae myceliales basi geniculatae, 10 μ crassae 350 μ longae, septatae (cellulis 40-46 μ longis), rectae, nigrae, apice subacutatae integrae. Perithecia globosa, astoma 270-320 μ diam., parenchymatice contexta e cellulis polygoniis rubro-brunneis (membrana obscuriore) extus leniter prominulis (perithecium verrucosum reddentibus) 10-14 μ cr. Asci 2-3-spori elongato-clavati vel elliptici. Sporae rectae, late cylindricae 4-septatae, cellulis aequalibus guttulatis, 55-68 × 24-30, olivaceo-brunneae. 4585

Hab. in foliis coriaceis plantae Dicotyledoneae, S. Leopoldo, Brasiliae (J. Rick).

244. **Meliola leptopus** Theiss., Broteria, Bot., v. XII, 1914, fasc. I, p. 23.— Irregulariter plus minus totam folii laminam inquinans; opace nigra. Hyphae mycelii 8-9 μ crassae, rectae, brunneae, opposite vel alterne ramosae. Hyphopodia capitata opposita pedicellata, recta 4586

cylindraceo-clavata, saepe fere cylindracea, integra, 18-20 × 10; hyphopodia mucronata ampulliformia, continua, opposita, approximata, recta vel incurva. Setae myceliales ca. 350 × 8, fuligineo-brunneae, rectae, basi late arcuatae, apice laetiores sensim acutatae. Perithecia ca. 280 μ diam., globulosa, verrucosa (cellulis extus acute prominulis polygoniis), cellulis rubro-brunneis irregulariter polygoniis, 25-48 μ magnis ostiolo demum irregulariter stellato aperta. Asci bispori, ca. 56 × 34, elliptici. Sporae brunneae, 4-septatae, cylindraceae, guttulatae, constrictae, cellulis aequalibus (vix extimis majoribus), 48-54 × 16-20.

Hab. amphigena in foliis plantae Dicotyledoneae indeterminatae, S. Leopoldo, Brasiliae merid.

245. **Meliola tuberculata** Stev., Mel. Porto Rico, in Ill. Biol. Monogr. II, 1916, p. 490. — Coloniis amphigenis, saepius epiphyllis, saturate atris, 1-3 mm. diam., circularibus; mycelio sat denso, valde sinuoso; hyphopodiis capitatis alternis, ovatis vel irregulariter lobatis, typice 30 μ circ. distantibus; hyphopodiis mucronatis paucis, anguste conoideis; setis myceliabibus et perithecialibus nullis; peritheciorum appendicibus conoideis, 51 × 27, copiosissimis, quaque fere cellula superficiali in appendicem producta; peritheciis 160 μ diam.; ascis evanidis; sporidiis 4-septatis, 38 × 14, obtusis, leniter constrictis. 4587

Hab. in foliis Dicotyledoneae cujusdam haud determinatae, Vega Baja, Porto Rico. — Species appendicibus perithecialibus, mycelio sinuoso-contorto hyphopodiisque variabilibus eximie distincta.

246. **Meliola aliena** Syd. in Leaflets of Philipp. Bot. V (1912) p. 1535.— Plagulas atras velutinas effusas ca. 0,5-1 cm. longas vel confluendo majores efformans; mycelio proprio repente parcissime evoluto, ex hyphis fuscis septatis 6-8 μ cr. composito; hyphopodiis alternantibus, irregularibus, rectis vel curvulis; setis mycelicis e contra numerosissimis, validis, rectis vel subrectis, vel etiam irregulariter curvatis, atris, opacis, 200-275 μ longis, 8-14 μ cr., apicem versus tenuatis sed obtusis; peritheciis gregariis, globosis, 130-170 μ diam., atris, globosis, tuberculatis; ascis bisporis, ovatis, fugacibus; sporidiis oblongis, utrinque rotundatis, 4-septatis, non vel vix constrictis, fuscis, 38-45 × 9-13. 4588

Hab. in ramulis dejectis, Puerto Princesa, Palawan, ins. Philipp.— Setis copiosissimis crassis praecipue distincta.

247. **Meliola conferta** Doidge, Trans. R. Soc. South Afr. V, 1917, p. 724 et 743, t. 59, fig. 13. — Amphigena, maculas atras, subcrustaceas 4589

1-3 mm. diam. efficiens; hyphis fuscis rectis, ramosis, 6-8 μ crassis, ex cellulis 11-18 μ longis compositis; ramis numerosis, oppositis; hyphopodiis capitatis numerosissimis, confertis oppositis, interdum unilateralibus vel alternis, 14-18 μ long.; cellula superiore diverse lobata, plerumque bi-triloba, quoque lobo bi-lobulato, 9-14 × 11-14; hyphopodiis mucronatis pallidis, 18 μ long.; setis mycelicis nullis; peritheciis (vix maturis) paucis, sparsis, 100-130 μ diam., atris, verrucosis, quibusdam cellulis externis usque 18 μ productis; ascis non visis; sporidiis atro-brunneis, 3-septatis, ad septa vix constrictis, utrinque attenuatis et rotundatis, rectis vel leniter curvatis, 43-50 × 18-25.

Hab. in foliis arboris ignotae, prope Durban, Africa austr. (J. Medley).

248. **Meliola curvata** H. S. Yates, The Philipp. Journ. of Sc. Bot. 13., 1918, p. 367. — Epiphylla, maculas atras, minutissimas, 0,5-2 mm. diam., orbiculares efformans vel confluentes; mycelio ex hyphis ramosis brunneis anastomosantibus septatis 7-8 μ crassis composito; hyphopodiis capitatis numerosis, plerumque alternantibus, cellula superiore globulosa, 10-12 μ diam., inferiore 3-5 μ longa; hyphopodiis mucronatis paucis, ampulliformibus, usque ad 20 μ longis; setis ca. 4-5 ad basim perithecii positis, primitus subhyalinis apice spiraliter curvatis dein erectis vel leviter curvatis, ad basim geniculatis, atris, 100-130 μ longis, 10 μ latis, apice acutis, simplicibus; peritheciis globulosis, atris, opacis, tuberculatis, 120-180 μ diam.; ascis ovatis, 4-sporis, 50-60 × 30; sporidiis cylindraceis, utrinque late rotundatis, ad septa vix constrictis, brunneis, 40-45 × 15-20. 4590

Hab. ad folia matricis ignotae, Catubig River, Samar, Ins. Philipp. (Ramos).

249. **Meliola heterodonta** Syd., Ann. Mycol. 14., 1916, p. 357. — Effusa irregularis, confluens; mycelio ex hyphis longis fuscis 5-7 μ crassis vix septatis (articulis praelongis) undulato-flexuosis hinc inde torulosis composito; hyphopodiis capitatis sat numerosis, alternantibus, semper integris, subcylindraceis, totis 12-18 μ longis, cellula apicali 7-9 μ lata, inferiore brevi; hyphopodiis mucronatis etiam numerosis, oppositis, 22 26 μ longis, ad basim 5-6 μ latis, apicem versus tenuioribus; setis tantum circa basim peritheciorum evolutis ibique sat numerosis rectiusculis tota longitudine opacis, 350-700 μ longis, ad basim 10-12 μ latis ad apicem mox dentibus 2-6, erectis plus minus longioribus (3-20 μ longis) acutis praeditis, mox in ra- 4591

mos duos fere erectos usque 30 μ longos divisis et ramis his apicem dentis 2-4 breves gerentibus; peritheciis sparsis tuberculatis, 130-160 μ diam., in sicco collapsis; ascis plerumque 2-sporis fugacibus; sporidiis oblongis, utrinque rotundatis, 4-septatis, (cellulis aequalibus), saturate castaneo-brunneis, ad septa constrictis, 30-35 × 9-12.

Hab. in foliis arboris ignotae, M. Maquiling, Ins. Philipp. (C. F. Baker).

250. **Meliola horrida** Rehm, Ascomyc. Philipp. III, in Philipp. Journ. of Sci. VIII (1913) p. 393. — Mycelio amphigeno, plagulas orbiculares, arcte marginatas, subcrustaceas, nigras, hirsutas, 4-5 mm. latas, dispersas formante; hyphis acutangulariter ramosis, rectis, arcte congregatis, ad 8 μ cr., hyphopodiis capitatis plurimis, oppositis, fere adjacentibus, 2-cellularibus, brevissime stipitatis, cellula superiore globoso-ovoidea ad 14 × 8, hyphopodiis mucronatis rarissimis, alternantibus, ad 18 μ long. obsessis; setis mycelialibus plurimis, erectis, subacutatis, nigro-fuscis, usque ad 400 μ longis, basi 12 μ cr.; peritheciis sparsis, globosis, non verruculosis, astomis, atris, 200 μ diam.; ascis ellipsoideis, bisporis, 50 × 30; sporidiis oblongis, utrinque rotundatis, subconstrictis, 28 × 18, flavo-fuscis. 4592

Hab. ad folia coriacea, Luzon, Prov. Laguna, Los Baños, ins. Philipp. (Baker). — Setis densis, fuscis, longis et forma dispositioneque hyphopodiorum distincta.

251. **Meliola megalopoda** Syd., Ann. Mycol. 15., 1917, p. 189. — Amphigena, plagulas orbiculares aterrimas 3-6 mm. latas velutinas facile secedentes formans; mycelium matrici dense adpressum, copiose digitato-ramosum, ex hyphis dilute brunneis 10-12 μ latis copiose septatis formatum; hyphopodia capitata copiosa, alternantia, 30-38 μ longa, cellula superiore 18-24 μ lata semper et saepe profunde lobata, cellula inferiore angusto-cylindracea vel cuneata; hyphopodia mucronata rara, subito in collum angustum longum producta, usque 28 μ longa, setae myceliales copiosissimae, semper plus minus falcato-curvatae, 600-900 μ longae, basi 10-12 μ latae, apicem versus mox non vel vix attenuatae, mox magis attenuatae, sive tota longitudine opacae, atrae, sive ad apicem pellucide brunneae, simplices; perithecia globosa, inter setas abscondita, 280-350 μ diam., glabra, levia, in sicco cupuliformiter collapsa; asci facile diffluentes; sporae maximae oblongae, 4-septatae, valde constrictae, obscure castaneo-brunneae, utrinque late rotundatae 62-70 × 22-30. 4593

Hab. in foliis coriaceis arboris ignotae humi jacentibus in silva, Mt. Maquiling, Ins. Philipp. (C. P. Baker).

252. **Meliola natalensis** Doidge, Trans. R. Soc. South Afr. V, 1917, p. 724 et 743, t. 59, fig. 12. — Amphigena, plerumque epiphylla, maculas atras carbonaceas, rotundatas, 2-3 mm. diam. efficiens; mycelio radiante ramoso; hyphis fuscis, subsinuosis et saepe ad septa constrictis, 6-8 μ crassis, e cellulis 14-18 μ long. compositis; ramis oppositis; hyphopodiis capitatis alternis v. unilateralibus, stipitatis, 18-21 μ long., cellula basali brevi, prope hyphas angustiore; capitulo latiore quam longo 2-3 lobato, quoque lobo-bilobulato, 12 14 × 16-20; hyphopodiis mucronatis raris, sparsis; tenuibus, rectis v. recurvatis, ca. 16-18 × 4-5, setis mycelicis nullis; peritheciis aggregatis, atris globosis, carbonaceis 130 150 μ diam., rugulosis, appendiculis numerosis, subcylindraceis, larviformibus, 40-45 × 18, apice interdum recurvatis; ascis bisporis; sporidiis 3-septatis, rectis v. leniter curvatis, ad septa valde constrictis 40 44 × 14-16. 4594

Hab. in foliis arboris ignotae, Ungeni prope Durban, Natal, Africa austr. (E. M. Doidge).

253. **Meliola samarensis** H. S. Yates, Philipp. Journ. Sc. Manila, XII (1917) p. 368.— Plagulas atras, velutinas, confluentes et superficiem petioliorum obtengentia efformans; mycelio denso, ex hyphis obscure brunneis septatis, 7 8 μ latis composito, ramis irregularibus; hyphopodiis capitatis paucis, alternantibus vel irregularibus, cellula superiore globosa, 15 μ diam., vel elongata et 10-15 × 15-20; cellula inferiore 4-5 μ longa; hyphopodiis mucronatis paucis; setis mycelicis numerosissimis, validis, 300 μ longis, 16 μ latis, erectis, leviter curvatis, opacis, atris, apice simplicibus, acutis; peritheciis numerosis, 150-250 μ diam., atris, opacis, tuberculatis, costulatis; ascis evanescentibus, 60-70 × 35-40, 2-4-sporis; sporidiis 4-septatis, brunneis, oblongis, ad septa leviter constrictis, utrinque late rotundatis, 45-48 × 18-20. 4595

Hab. in foliis petiolis plantae indet., Catubing River, Samar Ins. Philipp. (Ramos). — Videtur affinis *M. alienae.*

IRENE Syd. et Theiss., Ann. Mycol. 15., 1917, p. 194.— Characteres *Meliolae* sed setae nullae. — Typ. gen. *Meliola inermis* Kalch. et Cke.

1. **Irene papillifera** Syd., l. c. p. 194.— Epiphylla, plagulas minutas orbiculares 1-2 mm. diam. discretas formans; mycelium ex hyphis irregularibus saepe torulosis vel flexuosis septatis, obscure castaneo- 4596

brunneis 9-11 μ latis parum ramosis compositum; hyphopodia capitata modice numerosa, valde irregularia, plerumque piriformia, sed saepe lobata aut angulata, cellula superiore maxima inferiore brevi stipitiformi, obscure brunnea, tota 25-32 μ longa, superne usque 20 μ lata, basi 7-9 μ lata, alternantia; hyphopodia mucronata haud numerosa alternantia vel opposita 22-26 μ longa; setae nullae; perithecia in centro plagularum pauca conferta, aterrima, 150-200 μ diam., spurie ostiolata, contextu ex cellulis magnis sed variae dimensionis 14-22 μ diam. composito, ubique papillis conicis usque 35 μ longis ad basim 24-28 μ latis obscure brunneis summo apice aterrimis obsita; asci ovoidei, 2-spori; sporae ellipsoideo-cylindraceae, 4-septatae, rectae, ad septa leniter constrictae, brunneae, utrinque rotundatae, 42-50 × 18-21.

Hab. in foliis Saurauiae elegantis (Dilleniaceae), Ifugao et Bontoc, Luzon, Ins. Philipp. (H. S. YATES).

2. **Irene anisomera** Syd., l. c. p. 194. — Hypophylla, plagulas aterrimas 4597
2-10 mm. latas (v. ultra?) formans; mycelium ex hyphis densissime intertextis valde ramosis septatis (articulis 15-20 μ longis) obscure brunneis 6,5-8,5 μ crassis compositum; hyphopodia capitata copiosa, alternantia 16-23 μ longa, integra, recta vel recurvata, cellula superiore 10-13 μ lata, inferiore angustiore et minore; hyphopodia mucronata non visa; setae nullae; perithecia irregulariter distributa, sparsa vel aggregata, globosa, atra, 150-180 μ diam. asci bispori, elliptici; sporae oblongae vel cylindraceae, rectae vel inaequilaterae, utrinque rotundatae, 3-septatae, constrictae, obscure castaneo-brunneae subopacae, 48-52 × 15-19, cellulis extimis multo minoribus (ca. 9 μ), mediis duplo longioribus (ca. 17-18 μ) et amplioribus.

Hab. in foliis Podocarpi costati (Coniferae), Mt. Banahao, Laguna, Luzon (H. S. YATES).

3. **Irene Nephelii** Sacc., Notae Mycol. XXIV (Bull. Orto bot. Napoli, 4598
1918) sub *Meliola*, p. 4. — Coloniis minutis, epiphyllis, sparsis, 2 mm. diam., raro confluentibus, nigricantibus tenuiter velutinis; subiculi hyphis e peritheciis singulis exquisite radiantibus 270-325 × 8-9, repetite patenti ramosis, brunneis; hyphopodiis brevibus, bilateralibus, copiosis, ovoideis, obtusis, bicellularibus, 8-10 × 6, nonnullis apice acutatis; peritheciis globulosis, 145 μ diam., vix colliculosis, nigricantibus; ascis jam resorptis; sporidiis tereti-oblongis utrinque rotundatis, 30 × 12, constrictulo-4-septatis, fuligineis.

Hab. in foliis Nephelii cappacei (Sapindaceae), in Horto bot. Singapore (BAKER). — Setulae nullae visae, hinc ad novum

genus *Irenem* spectat potius quam ad *Meliolam*.

MELIOLINA H. et P. Sydow, Ann. Mycol. XII, 1914, p. 553 (Etym. a *Meliola* cui proxime affinis). — Characteres *Meliolae*, sed defectu hyphopodiorum diversum.

1. **Meliolina radians** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 553.— 4599
Hypophylla, plagulas 1-2 cm. latas valde velutinas atras aspectu radiantes v. dendriticas formans; mycelio ex hyphis dilute brunneis remote septatis parce sed irregulariter ramosis saepe torulosis v. varie curvatis formato; setis mycelicis numerosissimis, erectis, superne valde dendritico-ramosis, inferne 7-9 μ cr. et opacis, ad apicem in ramos 2-3 primarios divisis; ramis his in ramos secundarios iterum ramulos plus minus longos (subinde usque 80 μ longos) gerentes divisis; apicibus ramulorum dilute et pellucide brunneis; peritheciis solitariis, omnino inter setas absconditis, globosis, 175-250 μ diam.; ascis plerumque bisporis; sporidiis 3-septatis, constrictis, obscure castaneo-brunneis, 42-54 μ long., cellulis duabus extimis ca. 10 μ longis, duabus mediis majoribus ca. 15-20 μ longis.
Hab. in foliis Eugeniae xanthophyllae (Myrtaceae), Montalban pr. Rizal, Luzon, Ins. Philippin. (M. Ramos). — Secundum Auctores hoc genere pertinent *Meliola cladotricha* Lev., *M. pulcherrima* Syd. (in Eugenia Jambolana nec in Ficus benjamina ut in Fungi exot. exs. n. 124), *M. arborescens* Sydow.
2. **Meliolina Yatesii** Syd., Ann. Mycol., 15. 1917, p. 195. — Hypophylla, 4600
plagulas 0,5-2 cm. latas saepe confluentes tunc irregulares et majores velutinas crassas atras formans; mycelium ex hyphis longis non vel parce ramosis saepe lateraliter connexis pellucide brunneis remote septatis 7-9 μ crassis hyphopodiis destitutis compositum; setae mycelicae copiosissimae, erectae, rigidae, 250-320 μ longae, basi 8-10 μ crassae, opacae eadem ramificatione ut in Meliolina arborescente et Mel. pulcherrima; perithecia sat numerosa inter setas abscondita, globosa, 200-250 μ diam., astoma, aterrima, asci crasse clavati vel saccati, 110-150 × 35 40, octospori; sporae oblongatae, utrinque rotundatae, 3-septatae, ad septa plerumque fortiter constrictae, brunneae, 55-65 × 18-20, loculis valde inaequalibus, duobus extimis 11-14 μ longis et 10-12 μ latis, duobus mediis 18-22 μ, longis et 17-20 μ latis.
Hab. in foliis Viburni (?) sp. (Caprifoliaceae), Mt. Banahao, prov. Laguna, Ins. Philipp. (H. S. Yates).
3. **Meliolina malacensis** Sacc., Notae Mycol. XXIV (Bull. R. Orto bot. 4601

Nap. 1918) p. 5, sub *Meliola*. — Coloniis hypophyllis, modo minutis 2-3 mm. diam., modo confluendo usque ad 1-2 cm. lat., ambitu irregularibus, nigricantibus, velutinis; subiculi hyphis repentibus parcis laxe anastomosantibus, ergo obsolete reticulatis, septulatis, brunneis, sine hyphopodiis, setulis copiosis mycelialibus et perithecialibus, simplicibus, septatis, acutis, 300-350 × 5-5,5, rectis; peritheciis globulosis, astomis, deorsum setulosis, 250-300 μ diam., contextu minute parenchymatico atro-fuligineo; ascis oblongo-clavatis, apice rotundatis, deorsum tenuato substipitatis, 80-90 × 25-30, paraphysibus bacillaribus, facile diffluentibus obvallatis, 4-8-sporis; sporidiis distichis ovato-oblongis, 3-septatis, ad septum medium leviter constrictis, 35-45 × 12-15, fuligineis.

Hab. in foliis adhuc subvivis Wormiae suffruticosae (Dilleniaceae), in Horto bot. Singapore (Baker). — Hyphopodiis deficientibus ad novum genus *Meliolinam* spectat.

4. **Meliolina arborescens** Sydow, Ann. Myc. XII, 1914, p. 553, *Meliola* 4602
arborescens Syd. in Leaflets of Philipp. Bot. VI (1913) p. 1923. — Plagulas atras circulares vel irregulares hypophyllas, 0,5-1,25 cm. longas, aterrimas, velutinas efformans; mycelio ex hyphis longis, non vel parce ramosis, pluribus lateraliter connexis, brunneis sed pellucidis, remote septatis (articulis 20-40 μ longis) 7-8 μ crassis, hyphopodiis destitutis composito; setis mycelicis numerosissimis, erectis, rigidis, 300-420 × 8-10, opacis, in parte superiore in 2-3 ramos primarios subrectos vel saepius repandos aut recurvatos divisis, ramis his in ramos secundarios iterum divisis; ramis secundariis sese divisis et ramulos ultimos erectos vel repandos, longiusculos, 35-70 × 3,5-6, apice leniter attenuatos vel obtusos, pellucide brunneolos usque subhyalinos gerentibus; peritheciis raris, intra setis absconditis, magnis, 300-450 μ diam., globosis, aterrimis, contextu opaco; ascis ovato-ellipsoideis, 1-2-sporis, fugacibus; sporidiis oblongis, utrinque rotundatis, 3-septatis, ad septa valde constrictis, obscure castaneo-brunneis, 42-60 × 16-22, loculis duobus extimis multo minoribus globulosis v. hemisphaericis 10-12 μ altis, duobus centralibus majoribus 17-22 μ longis et latis.

Hab. in foliis vetustis Eugeniae globosae (Myrtaceae), Todaya, Mt. Apo, Mindanao, ins. Philipp. (A. D. E. Elmer). — Species perdistincta, pulchra, facile dignoscenda.

5. **Meliolina pulcherrima** (H. et P. Sydow) H. et P. Sydow, Ann. Myc. XII, 4603
1914, p. 553, *Meliola p.* H. et P. Sydow, Ann. Mycol. XI, 1913, p. 254, fig. I. — Hypophylla, aterrima, crassa, densissima, velutina, primitus

maculas orbiculares 3-10 mm. diam. dein confluendo irregulares et majores efformans, fere omnino ex setis mycelicis densissime stipatis constans; mycelio parco, rudimentari, ex hyphis fusco-brunneis 7-9 μ crassis ramosis remote septatis longitudinaliter conjunctis v. anastomosantibus composito, hyphopodiis nullis; setis mycelicis innumeris, erectis, rigidis, 350-425 μ long. basi 7-9 μ cr., remote septatis, atris, opacis, superne bi-trifidis et dilutioribus, quoque ramo ramulos 2 vel 3 plerumque longissimos emittente, ramis ramulisque plus minus late patentibus et saepe etiam recurvatis, apicibus ramulorum dilute coloratis saepe subhyalinis, obtusis saepeque etiam leniter dilatatis; peritheciis paucis inter setas absconditis, vix visibilibus, globosis, atris, 175-350 μ diam., contextu opaco, basi hyphis plerumque simplicibus usque 130 μ long. cinctis; ascis ovato-oblongis usque crasse clavatis, 55-100 × 30-40, 6-sporis, sporidiis tristichis, oblongis, triseptatis, non vel vix constrictis, utrinque late rotundatis, brunneis, 48-58 × 12-16.

Hab. in foliis vivis Eugeniae Jambolanae (Myrtaceae), Antipolo prov. Rizal, Luzon, ins. Philipp. (M. Ramos).

6. **Meliolina naplochaeta** Syd., Ann. Mycol. 15., 1917, p. 145. — Hypophylla, plagulas minutas discretas rotundatas, 1-2 mm. diam. velutinas aterrimas formans; mycelio ex hyphis breviusculis fuscidulis flexuosis simplicibus v. parce ramosis, 4-5 μ cr. remote septatis haud hyphopodiatis composito; peritheciis paucis in quaque plagula, 150-180 μ diam.; setis circa perithecia dense stipatis, copiosis, simplicibus, erectis, 200-300 × 5-7, obscure brunneis, ad apicem plerumque rotundatis, rarius leniter tenuatis; ascis oblongis v. oblongo-ovoideis, breviter pedicellatis, 6-8-sporis, 80-130 × 35-45; sporidiis 2-3-stichis, oblongis, 3-septatis, non v. leniter constrictis, fuscis, 40-55 × 16-20, utrinque utplurimum tenuatis, apicibus obtusis, loculis extimis multo minoribus, subinde minutissimis. 4604

Hab. in foliis Metrosideri polymorphae (Myrtaceae), Nuuanu Pali, Oahu, ins. Sandwicensium (H. L. Lyon).

MELIOLINOPSIS Beeli, Bull. Jard. Bot. Ètat Bruxelles v. 7., 1920, p. 101, 102 (Etym. a *Meliola* et *opsis* quia proximum).—Asci persistentes, cylindracei, plerumque 8-spori, plerumque paraphysati. 4605

Huc ducendae sunt secund. Beeli: *Meliola Quercinopsis* var. *megalospora* Rehm, *M. hyalospora* Lév., *manaosensis* Henn., *iquitosensis* Henn., *Uvariae* Rehm, ? *clavatispora* Speg., *Yatesii* Syd., *callosperma* Speg., *quercina* Pat., *anomala* Tracy et Earle, *curviseta* Rac., *cla-*

vispora Pat., *haplochaeta* Syd., *Theobromae* Fc. v. Faber, *Tetradeniae* Berk., *octospora* Cke.

EUANTENNARIA Spegaz., Fungi Costaric. nonn., Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 187. — Subiculum ex hyphis torulosis pro parte repentibus pro parte erectis intricatisque compositum, hyphopodiis destitutum; perithecia inter hyphas nidulantia globosa astoma membranaceo-coriacella parenchymatica atra glabra v. basi hyphis paucis radiantibus ornata; asci 2-8-spori; sporae majusculae fusoideo-cylindraceae 2-5 septatae fuligineae. A *Meliola*, cui peraffinis, recedit subiculi fabrica nec non hyphopodiorum deficientia.

1. **Euantennaria tropicicola** Spegaz., l. c. cum icon.— Late effusa aterrima, primo tenuis araneosa dein plus minusve crassa subpannosa, hyphis erectis 0,5-2,5 mm. alt. subsimplicibus, dense articulatis, articulis subglobosis 10-15 × 12-14; peritheciis majusculis 250-300 μ diam. glabris; ascis saepius tetrasporis, 60-65 × 30; sporidiis subfusoideis 5-septatis non v. vix constrictis fuligineis sed pellucidis laevibus, 35-40 × 10-13. 4606

Hab. in foliis vivis Miconiae cujusdam, in silva La Palma Costarica, America trop. (Prof. H. Pittier).

Sect. 6. — Scolecosporae

OPHIOMELIOLA Starb. — Syll. XVI p. 416, XXII p. 57. — Secundum Theissen et Sydow, Ann. Mycol. XV, 1917, p. 467, typus huius generis, sive *Ophiom. Lindmani* Starb., ad Pseudosphaeriaceas adscribenda.

1. **Ophiomeliola Bomplandi** Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires XXIII p. 46 (1912). — Maculis nullis; peritheciis hypophyllis, sparsis, minutis, sublenticularibus, 150 μ diam., astomis, nigris, membranaceis, setis tenuibus, patentiusculis, simplicibus, rectis vel vix flexuosis, 100-300 × 3-4, olivaceis, apice subhyalinis, 2-4-septatis conspersis, excipulo parenchymatico-sinuoso, majusculo, olivaceo-opaco; subiculo parcissimo ex hyphis tortuosis 3-4 μ cr. cinctis; ascis cylindraceis, apice rotundatis, basi breviter cuneato-pedicellatis, 70-90 × 10-12, paraphysibus parcis filiformibus vix longioribus cinctis, octosporis; sporidiis filiformibus, utrinque obtusiusculis, 60-70 × 3, septis 3-5 praeditis, ad septa non constrictis, olivaceis. 4607

Hab. in foliis vivis Colleae sp. (? Compositae, ? Leguminosae), in pratis prope Bompland, Misiones: Argentina (P. JÖRGENSEN).

RIZALIA H. et P. Sydow, Ann. Mycol. XII, 1914, p. 546. (Etym a loco natali). — Perithecia superficialia, irregulariter globosa v. ovata, diu clausa, tandem vertice irregulariter aperta, mycelio parco ex hyphis fuscis composito et setas erectas v. suberectas gerente haud hyphopodiato insidentia, minuta, extus (praecipue superne) setis paucis irregulariter obsita, pariete crasso grumoso haud parenchymatico. Asci clavati, aparaphysati, sessiles, octospori. Sporidia elongato-filiformia, hyalina, 1-septata.

1. **Rizalia fasciculata** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 546, 4608
fig. 1. — Peritheciis sparsis v. laxe aggregatis, superficialibus, irregulariter globosis, usque irregulariter ovatis, 65-105 μ altis 45-70 μ latis, basi hyphis mycelicis cinctis v. potius suffultis, extus (praecipue parte superiore) setis paucis obtusis, primo clausis, tandem vertice subostiolatim apertis, pariete crasso (6-8 μ), fuscis, contextu grumoso-coriaceo (haud celluloso) tenaci; mycelio parce evoluto ex hyphis brevibus fuscis constante, setas erectas obtusas fuscas 3-5-septatas, 50-90 × 4-6 gerente; ascis fasciculatis, clavatis, rotundatis, numerosis (20-30) in quoque perithecio, sessilibus, aparaphysatis, 26-32 × 9-11, octosporis; sporidiis parallele fasciculatis, elongatis, plerumque plus minus inaequilateris, subinde fere falcatis, utrinque parum attenuatis, hyalinis, medio 1-septatis, primo minute guttulatis, ascorum fere longitudine, 25-29 × 1,5-2.

Hab. parasitica in Microthyriacea quadam indet., ad folia Diospyri sp. (Ebenaceae), pr. Rizal, Ins. Philippin. (M. RAMOS).

TRICHOSPERMELLA Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires XXIII p. 38 (1912). — (Etym. *thrix, thricos* et *sperma*, ob sporidia filiformia). — Perithecia superficialia, ostiolata, glabra, subiculo parco donata. Asci cylindracei, aparaphysati, octospori. Sporidia filiformia hyalina.

1. **Trichospermella pulchella** Speg., loc. cit., cum ic. — Peritheciis spar- 4609
sis, hypophyllis, ex tomento erumpentibus, aterrimis, globosis, 250-300 μ diam., valide umbonato-vel subcylindraceo-ostiolatis, subiculo parcissimo ex hyphis gracilibus, 2-4 μ cr., dense irregulariterque ramulosis, hyalinis vel chlorinis efformato adnatis; ascis clavato-fusoideis, apice late obtuseque rotundatis deorsum sensim attenuatis, breviter pedicellatis, 100 × 8; sporidiis filiformibus, utrinque rotun-

datis, multiguttulatis, hyalinis, 75-80 × 1-1,5.

Hab. in foliis vivis Cestri pubescentis (Solanaceae), in nemoribus prope Santa Ana, Misiones: Argentina.

PERISPORIEAE DUBIAE V. INCERTAE SEDIS

LANOMYCES Ern. Gäumann, Ann. Jard. Bot. de Buitenzorg, v. XXXII, 1.re P., p. 46. — Mycelio intramatricali v. superficiali, lanato, brunneo; peritheciis globosis, astomis, flavis parenchymaticis; ascis singulis in peritheciis nascentibus, magnis, multisporis; sporidiis hyalinis unicellularibus. — Sec. Auct. « hoc genus inter Perisporiaceas maxime segregatum, nam adhuc sola species est quae hyphis ascogenis caret, ubique perithecia ascum solum, magnum multisporum in se continent. Forte quaedam analogia inter Erysiphaceas et Perisporiaceas esse potest... ».

1. **Lanomyces tijbodensis** E. Gäumann, l. c. — Amphigena; mycelio ara- 4610
chnoideo dein lanuginoso, persistenti, primum flavo, demum vetustate fulvo v. atro; peritheciis minutissimis, singulis v. gregariis in mycelio superficiali insidentibus, plus minusve sphaeroideis, peridio tenui praeditis, flavis monascis, 110-230 μ diam.; appendicibus creberrimis longissimis filiformibus, simplicibus v. ramosis, sursum flexis; sporidiis copiosis ovato-cylindraceis, hyalinis, multinucleatis, 15-28 × 10-16, levibus.

Hab. in foliis Castaneae argenteae Bl. (Fagaceae), in silva primaeva prope Tjibodas, Java.

RHIZOGENE Sydow, Ann. Mycol. 18., 1920, p. 181. — Stromata orbiculariter dense aggregata, superficialia, atra, hypostromate communi subcuticulari, hyphis liberis parallelis verticalibus suffulta; loculi ad marginem stromatis evoluti, omnino immersi; asci sporaeque adhuc tantum immaturi visi.

1. **Rhizogene Symphoricarpi** (Sydow) Sydow, l. c., *Lasiobotrys Sympho-* 4611
ricarpi Sydow, Ann. Mycol. 16., 1918, p. 244. — Amphigena; sclerotia in greges orbiculares 1-1,5 mm. diam. laxe disposita, sese non vel vix attingentia, orbicularia vel orbiculari-turbinata 240-350 μ diam., usque 150 μ alta, circumcirca crusta atra praedita, intus viridulo-albida, e cellulis 8-10 × 6-8 metientibus contexta, subtus hyphis flexuosis 2-3 μ crassis subhyalinis fulta, hypostromate denso atro-brunneo; perithecia sporaeque non visa.

Hab. in foliis vivis Symphoricarpi spec. (Caprifoliaceae), San Juan Mts., Colorado, America bor.

Subfam. 5. Capnodieae Sacc.

Dispositio secundum Cl. Spegazzini in l. c.

1. Perithecia	expansa-corniformia simplicia v. ramosa, sporidia muralia colorata	Capnodium Mntgn.
	subglobosa	2.
2. Ostiolum	attenuatum	3.
	plano v. vix umbonato	6.
3. Sporidia	elongata filiformia, v. fere pluriseptata olivacea	Ophiocapnodium Speg. n. gen.
	brevia, plus minus ellipsoidea	4.
4. Sporidia	1-locularia, colorata	Capnodiopsis Hug.
	2-locularia, chlorina	5.
5. Os ostioli	nudatum nec conidiferum	Rhynchomeliola Speg.
	conidiis praeditum	Henningsomyces Sacc.
6. Perithecia	pubescentia, pilosa v. hispida	7.
	omnino glabra	11.
7. Sporidia	2-locularia	8.
	multilocularia	9.
8. Sporidia	hyalina	Perisporiopsis Hng.
	olivacea	Acanthostoma Thsz.
9. Sporidia	elongata, subfiliformia, chlorina	Ophiomeliola Strb.
	brevia, non filiformia	10.
10. Sporidia	transverse tantum septata	Hypocapnodium Speg. n. gen.
	transverse et longitud. septata	Capnophaeum Speg. n. gen.
11. Perithecia	pedicello elongato simplici v. ramoso	12.
	sessilia v. subsessilia	14.
12. Sporidia	1-locularia, subglobosa	Capnodiella Sacc.
	multilocularia	13.
13. Sporidia	transverse tantum septata, hyalina	Capnodina Sacc.
	transverse et long. sept., olivacea	Paracapnodium Speg.
14. Sporidia	elongata filiformia	Pseudomeliola Speg.
	brevia nec filiformia	15.
15. Sporidia	continua, hyalina (= Guignardiella Sacc. et Syd.)	Pilgeriella Hng.
	1-pluriseptata	16.
16. Sporidia	transverse tantum septata	17.
	transverse et longit. septata	21.
17. Septa	septum unicum medium, sporid. hyalina	Capnodinula Speg. n. gen.
	septa plurima	18.
18. Sporidia	hyalina	19.
	colorata	20.

19. Perithecia	setulis circumdata	Microtyle Speg. n. gen.
	omnino nuda	Limacinia Neg.
20. Asci	8-spori	Metacapnodium Speg. n. gen.
	16-spori	Capnodaria Sacc.
21. Sporidia	hyalodictya	Zukaliopsis Hng.
	phaeodictya	Limacinula Sacc.

Dispositio sec. Theissen et Sydow, Ann. Mycol. 15., 1917, p. 471 (nec Theissen, in Verh. zool.-bot. Ges. Wien. 66., 1916, p. 363).

A. Perithecia pedunculata v. varie verticaliter conformata, parietibus plerumque ex hyphis meridianis constitutis (Eucapnodieae Th. et Syd.)

I. Sporidia transverse tantum septata, 4-plurilocularia.

1. Sporidia hyalina

a) Mycelio perisporioideo, crasso, spugnoso hyphis gelatinosis contexto — 1. Scorias Fr.

b) Mycelio dematiaceo, membranaceo — 2. Antenella Th. et Syd.

2. Sporidia brunnea, asci saepe polyspori — 3. Capnodaria Th. et Syd.

II. Sporidia muriformia

1. Hyalina — 4. Paracapnodium Speg.

2. Brunnea — 5. Capnodium Mont.

B. Perithecia insidentia (raro hyphis basilaribus stipitata), globosa, dematiacea (Chaetothyrieae Theiss.)

I. Mycelium et perithecia superficialia libera

a) Setulae praesentes

1. Sporidia hyalodidyma

α) Perithecia levia, tenui membranacea, pallida; mycelio setulis longis tortuosis praedito. — 6. Dimerosporina v. Höh.

β) Perithecia molli-coriacea, obscura; perithecia et mycelium breviter setulosa — 7. Chaetothyrina Theiss.

γ) Perithecia tenui-membranacea, obscura, typice apice tantum monosetulosa; mycelio setuloso — 8. Ceratochaete Syd.

2. Sporidia phaeodidyma
   α) Mycelium exyphopodiatum
      (1) Perithecia monasca — 9. Balladyna Rac.
      (2) Perithecia polyasca — 10. Balladynopsis Theiss. et Syd. n. gen.
   β) Mycelium exyphopodiatum — 11. Neohoenelia Theiss. et Syd. n. gen.
3. Sporidia hyalophragmia
   α) Setulae peristomales tantum praesentes — 12. Aithaloderma Syd.
   β) Setulae peritheciales v. mycelicae praesentes — 13. Chaetothyrium Speg. (= Zuckalia Sacc., Chaetasterina Bub.)
4. Sporidia phaeophragmia — 14. Setella Syd.
5. Sporidia hyalodictya — 15. Treubiomyces v. H.
6. Sporidia filiformia — 16. Actinocymbe P. Henn.

b) Setulae nullae

1. Sporidia hyalodidyma — 17. Calyptra Th. et Syd. n. gen.
2. Sporidia phaeodidyma
   α) Perithecia monasca — 18. Balladynella Th. et Syd. n. gen.
   β) Perithecia polyasca — 19. Henningsomyces Sacc. (= Dysrhynchis Clem. 1909)
3. Sporidia hyalophragmia — 20. Limacinia Neg.
4. Sporidia phaeophragmia — 21. Phragmocapnias Th. et Syd. n. gen.
5. Sporidia e hyalina pallide phaeodictya — 22. Phaeosaccardinula P. Henn. (= Tephrosticta Syd. = Capnites Th. = Limacinula Sacc. = Phaeopeltis Clem.)
6. Sporidia atro-phaeodictya — 23. Coccodinium Mass. (Naetrocymbe Körb.)

II. Mycelium v. perithecia immersa
   a) Mycelium subcuticulare, perithecia libera, sporidia phaeodidyma — 24. Kusanobotrys P. Henn.
   b) Mycelium liberum, perithecia pede centrali infixa; sporidia hyalodidyma — 25. Adelopus Th. n. nov. (= Cryptopus Theiss., nec Lindl., Orchid.)

Genera dubia:

Sporidia phaeodidyma: asci 8-spori (*Lizonia* De Not.); asci 16-spori (*Pseudolizonia* Pir.).

Sporidia phaeophragmia (*Asteridiella* Mc Alp.).

Genera removenda:

Antennullaria Rchb. (= Antennaria Lk).
Apiosporium Kze.
Capnodiella Sacc. 1905 = Sorica Giesenh. 1904 (Syll. XVII p. 621).

Lizoniella (P. Henn.) Sacc. = Sphaeriaceae.
Capnodiopsis P. Henn. = Agyrieae.
Seuratia Pat. = Atichia Flot. (Syll. XXII p. 769) : Saccharomycetaceae.
Perisporiopsis P. Henn. = Pseudosphaeriaceae.
Zukaliopsis P. Henn. = Myriangeae.

Sect. 1. Hyalodidymae

DIMEROSPORINA v. Höhnel, Fragm. z. Mykol. n. 610, 1909; Theissen et Sydow, Ann. Myc. 15., 1917, p. 474. — Syn. *Dimerosporiella* v. Höhn. nec Spegazzini, Syll. XXII p. 29.

1. **Dimerosporina Dinochloae** Syd., Philipp. Journ. of Sc., v. 9., Sect. C., n. 2, 1914, p. 161. — Epiphylla, maculas minutas parum perspicuas rotundatas 2-4 mm. latas tandem confluentes atro-griseas formans ; subiculo superficiali, parce evoluto, ex hyphis brevibus cellulosis (cellulis ca. 8-12 μ long. v. latis) conidia helminthosporioidea obclavata 4-6 septata non constricta flavidulo-fuscidula 55-75 μ longa 11-14 μ lata, crasse tunicata (membrana 2-3 μ crassa) generantibus composito, fusco, ubique setis numerosis erectis rectis vel vix flexuosis apice semper obtusis atro-olivaceis 100-220 μ longis 9-11 μ latis septatis (articulis 15-25 μ longis) obsito ; pycnidiis numerosis, primitus globulosis, dein obovatis, stipitatis, spermatia minutissima hyalina 2 μ longa 1 μ lata includentibus ; peritheciis eadem forma et magnitudine ac pycnidiis, pedicello brevi crasso 5-20 μ longo 5-10 μ lato suffultis, primitus globoso-clausis, dein obovatis, et imperfecte ostiolatis, 40-50 μ diam., contextu tenaci olivaceo-fuligineo ex cellulis 6-8 μ diam. composito ; ascis sporidiisque nondum maturis. 4612

Hab. in foliis Dinochloae scandentis (Graminaceae), Palawan, Mount Capoas, Taytay, Ins. Philipp. (MERRILL).

2. **Dimerosporina pusilla** Syd., Enum. Philipp. Fungi I, in Philipp. Journ. of Sci. VIII (1913) p. 269. — Epiphylla, sparsa, maculas minutissimas oblongas, $^1/_3$-1 × 0,1-0,2 mm., atras formans; subiculo superficiali, tenui, membranaceo, parce evoluto, celluloso, ubique setis numerosis erectis, rigidis, opacis, obscure fuscis, ad apicem obtusis leniterque dilatatis, 2-3-septatis, 40-55 × 5-8 obsito ; peritheciis numerosis, globulosis vel globoso-obpiriformibus, 35-60 μ altis, 25-50 μ latis, basi late rotundatis et hypha brevissima suffultis, superne etiam rotundatis et primo clausis, tandem imperfecte ostiolatis, contextu tenaci olivaceo-fuligineo ex cellulis po- 4613

lygonalibus 5-8 μ latis composito; ascis pluribus, 4-8, in quoque perithecio, ovatis, antice crasse tunicatis, aparaphysatis, 20-28 × 16-20, octosporis; sporidiis conglobatis, oblongis, utrinque rotundatis, medio vel circa medium 1-septatis, non vel vix constrictis, hyalinis, 15-18 × 3,5-4,5.

Hab. in foliis vivis Lophatheri gracilis (Graminaceae), Polillo, Mt. Malulud, ins. Philipp.

CHAETOTHYRINA Theissen, Ann. Mycol. 11., 1913, p. 495, 496.— Mycelium dematiaceum. Perithecia insidentia, globosa, polyasca. Setulae peritheciales v. mycelicae praesentes. Sporidia hyalodidyma.— Typus *Chaetothyrina Musarum* (Speg. ut Chaetothyrium) Theiss. 4614

CERATOCHAETE Syd., Ann. Mycol. 15., 1917, p. 179.— Mycelium superficiale, ex hyphis brevibus dense ramosis et anastomosantibus crustacee conjunctis compositum, circa perithecia setigerum. Perithecia globosa, astoma, contextu fusco parenchymatico unistratoso, ad apicem setula 1 vel rarius 2-3 longis rigidis praedita. Asci octospori, aparaphysati. Sporae hyalodidymae, oblongo-ellipsoideae vel ovatae.

1. **Ceratochaete philippinensis** Syd., Ann. Mycol. 15., 1917, p. 179.— Amphigena, plagulas tenues laxas interruptas irregulares formans; mycelium crustaceum, ex hyphis brevibus densissime ramosis anastomosantibusque pelliculae ad instar conjunctis fuscidulis 6-7 μ crassis compositum, haud hyphopodiatum, hinc inde, praecipue circa perithecia setulas simplices erectas rigidas usque 450 μ longas fuscidulas obtusas ad apicem saepe dilutiores usque subhyalinas 6,5-8 μ crassas remote septatas crasse tunicatas gerens; perithecia gregaria, sessilia, globosa, 60-100 μ diam., astoma, ad verticem plerumque setula singula (rarius setulis 2-3) erecta rigida fusca obtusa septata 50-200 μ longa 6,5-8 μ crassa gerentia, contextu fusco unistratoso paranchymatice e cellulis 9-11 μ diam. composito, ca. 5-10 ascos includentia; asci brevissime pedicellati vel fere sessiles, ovato-oblongi usque oblongi, 45-50 × 18-24, octospori, ad apicem incrassati et rotundati, aparaphysati; sporae 2-3-stichae, oblongo-ovatae vel ovato-ellipsoideae, utrinque rotundatae vel ad basim subinde leniter attenuatae, medio septatae, non constrictae, hyalinae, 18-22 × 7-9. 4615

Hab. in foliis subemortuis graminis cujusdam, pr. Rizal, Ins. Philipp. (H. S. Yates).

CALYPTRA Theiss. et Sydow, Ann. Mycol. 15., 1917, p. 478. — Mycelium dematiaceum membranaceum, non setulosum. Perithecia insidentia, globosa, levia, dematiacea mucosa, ostiolo indistincto. Asci clavati, fasciculati, octospori. Sporidia hyalodidyma, ex elongata fusoidea. Typus sistit *Calyptra cordobensis* (Speg.) Th. et Syd., et *C. capnoides* (Ell.) Th. et Syd. 4616

ADELOPUS Theiss. nom. nov., in Theiss. et Syd., Ann. Mycol. 15., 1917, p. 482. — Syn. *Cryptopus* Theiss. 1914, Ann. Myc. 12., p. 72, nec Lindl. (Orchideae). — Mycelium sparse dematiaceum. Perithecia superficialia pede cylindraceo subepidermico praedita, depresse globosa, levia, indistincte ostiolata, coriacea, nigra. Asci basilares, octospori, clavati. Sporidia hyalodidyma. — Typus gen. *Adelopus balsamicola* (Peck sub *Asterina*) Theiss. 4617

CAPNODINULA Spegazzini, Notas Mycologicas « Physis » t. IV, 1918, p. 288. — Subiculum normale ; perithecia subglobosa ostiolata non v. vix umbonata, glabra ; asci octospori ; sporidia hyalodidyma.— Typus generis *Capnodinula trichodea* (Rehm) Spegaz. l. c. — *Asterella trichodea* Rehm, Syll. XVI p. 1141.

1. **Capnodinula Tonduzi** Spegaz., Fungi Costaric. nonn., in Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 189, cum icon. — Subiculum late effusum tenuiter subpelliculosum nigrum exhyphopodiatum ; perithecia solitaria v. hinc pauci-gregaria (3-5), pusilla 75 μ diam. ex hemisphaerico sublenticularia, membranacea parenchymatica, minute umbonato-ostiolata, atro-olivacea, glabra sed basi hyphis nonnullis radiantibus radicata ; asci cylindraceo-subclavulati, apice obtusissime rotundati, deorsum sensim in pedicello brevi crassiusculoque attenuati, 25-30 × 10, aparaphysati, octospori ; sporae parvae elongato-subellipticae, non v. vix subclavulatae, medio 1-septatae non constrictae, hyalinae, 10-11 × 2,5-3. 4618

Hab. in foliis et in sarmentis vivis Vitis caribeae (Vitaceae), prope San Josè Costarica, America trop.

MICROTYLE Spegaz., Rel. mycol. trop. etc. in Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, p. 96 et icon. p. 179. — Pulvinuli atri capnodiacei superficiales parvi compactiusculi granuloso-velutini subiculo dematieo exhyphopodiato ; perithecia globosa sessilia ostiolato-pertusa atra coriacella glabra, ima basi pilis numerosis erectis simplicibus cinctis ; asci octospori paraphysati ; sporidia angusta,

medio 1-septata, hyalina. — Genus notis plurimis ad *Capnodinulam* vergens, pulvinulis parvis compactiusculis non diffusis nec relaxatis, peritheciis basi setulis cinctis distinctissimum.

1. **Microtyle Bergi** Spegaz., l. c. — Maculis nullis; pulvinulis hypophyllis inordinate laxeque longitudinalibus, umbrino-fuligineis; peritheciis constipatis late umbilicato-perforatis (20 μ), subglobosis 100-150 μ diam., pilis brevibus, 25-100 × 5, densiusculis erectis obtusis basi cinctis; ascis subfusoideis apice rotundatis deorsum breviter cuneato-pedicellatis, 80 × 8, paraphysibus filiformibus septulatis parum longioribus obvallatis, octosporis; sporidiis fusoideo-subacicularibus utrinque acutiusculis, 16 × 3, distichis v. tristichis, ad septum non constrictis. 4619

Hab. ad folia Merostachydis sp. (Graminaceae), Corcovado prope Rio de Janeiro, America austr. (C. Berg). — Habitus *Dimerinae Negerianae* Thsz. sed ostiolo peritheciorum diversa.

Sect. 2. Phaeodidymae

BALLADYNA Racib. — Syll. XVI p. 411, XXII p. 41.

1. **Balladyna Melodori** Syd., Philipp. Journ. of Sc., v. 9. Sect. C., n. 2., 1914, p. 160. — Amphigena, saepius epiphylla, plagulas primitus orbiculares 3-10 mm. diam., atras opacas tandem confluentes et magnam folii partem obtegentes formans; mycelio ex hyphis valde irregulariterque ramosis fuscis vel obscure brunneis 5-9 μ crassis saepius binis trinis lateraliter connatis torulosis irregularibus composito; hyphopodiis alternantibus, irregulariter distributis, continuis, globulosis usque oblongis, fuscis, 8-12 μ longis, 6-9 μ latis; setis mycelicis numerosis, erectis, rigidis 80-110 μ longis, basi 4-8 μ crassis, apicem versus attenuatis et acutis, ad apicem 2-2,5 μ crassis, obscure brunneis, opacis, continuis; peritheciis numerosis, sessilibus vel brevissime stipitatis, globosis usque ovatis vel breviter piriformibus, 50-65 μ altis, 40-48 μ latis, monoascigeris, pariete indistincte parenchymatico sordide olivaceo-brunneo vel sordide flavo-brunneo tenaci; ascis globosis vel subglobosis, 40-50 μ longis, 35-40 μ latis, aparaphysatis; sporidiis oblongis utrinque late rotundatis, medio 1-septatis et constrictis, levibus, primitus hyalinis, tandem olivaceo-brunneis, bi-tristichis, 17-19 × 4-4,5. 4620

Hab. in foliis Melodori (Anonaceae), Palawan Taytay, Ins. Philipp. (Merrill).

2. **Balladyna Ledermannii** Sydow, Engler' Botan. Jahrbüch. 54., 1916, 4621

p. 254. — Amphigena, saepius hypophylla, plagulas minutas orbiculares, 2-8 mm. latas, atras formans; mycelio ex hyphis tenuibus 3-4 μ crassis ramosis rectiusculis, sed ramosis et densiuscule intertextis septatis fuscidulis composito; hyphopodiis numerosis, alternantibus, continuis, globosis, v. subglobosis, integris, raro leniter lobulatis, 3-4,5 μ diam.; setis erectis, rectis vel subrectis, ad apicem obtusis, brunneis, numerosis, praecipue circa perithecia sitis, 50-120 × 4-6, ad apicem vix attenuatis; peritheciis dense stipatis, subsessilibus, globosis, 40-65 μ diam., 1-pauciascigeris, tenaci-membranaceis, contextu flavo-fusco ex cellulis 4,5-6 μ latis composito; ascis ovatis, 32-38 × 20-25, octosporis; sporidiis oblongis, utrinque obtusis, pallide olivaceis, crasse et obscurius 1-septatis, 13-16 × 4-4,5, loculo infero subinde parum longiore.

Hab. in foliis vivis Bignoniaceae cujusdam, prope Sepik Nova-Guinea nord.-or., Africae (LEDERMANN).

3. **Balladyna Butleri** Syd. in Syd. et Butl., Ann. Mycol. IX, 1911, p. 388 4622
fig. 7. — Hypophylla, velutina, maculas atras oblongas 2-10 mm. longas formans; subiculo superficiali, ex hyphis fuscis 8-10 μ cr. irregulariter ramulosis anastomosantibusque hyphopodia pauca primitus 1-dein pluricellularia et perithecia immatura obpiriformia gerentibus composito; setis subiculo numerosissimis, erectis, rectis v. subrectis, apice obtusis, fusco-brunneis, opacis, apice dilutioribus, 150-220 μ long., basi 8-10 μ cr., sursum angustioribus; peritheciis numerosissimis, dense stipatis, obpiriformibus vertice breviter obtuseque conicis, basi rotundatis, 50-75 μ altis medio 45-60 μ latis, in hyphis cellula stipitiformi lateraliter ortis et quasi stipitatis, praeterea lateraliter circa hanc cellulam hyphis paucis tenuibus suffultis, parenchymatice contextis, pariete sub microscopio dilute brunnea ex cellulis polyedricis 6-10 μ latis superficie tenuiter areolatis composito, circa ostiolum subhyalino, ascis 1-2 tantum includentibus; ascis aparaphysatis, ovatis v. subsphaericis, 30-40 × 20-35, octosporis, apice crassiuscule tunicatis; sporidiis conglobatis, elliptico-oblongis, utrinque rotundatis, medio 1-septatis et constrictis, diutissime hyalinis, sero dilutissime brunneolis tandemque ut videtur brunneis, 18-22 × 9-10.

Hab. in foliis Bambusae sp. (Graminaceae), Khasi Hills Assava, Indiae or. (E. J. BUTLER) — *B. velutinae* (B. et C.) v. Höhn. et *B. amazonicae* v. Höhn. proxima, a prima differt hyphopodiis paucis pariete peritheciorum pallide brunnea, ab altera setulis numerosis, ab utraque colore sporarum.

4. **Balladyna uncinata** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 546. — 4623
Epiphylla plagulas minutas omnino superficiales oblongas 1-2 mm. longas atras tenues formans; mycelio ex hyphis densissime breviterque ramosis fuscis v. brunneolis 7-9 μ latis, septatis composito; setis numerosissimis ad basim semper plus minus valde uncinatis v. semel etiam sigmoideo-curvatis, ceterum erectis v. fere erectis, crasse tunicatis, tota longitudine pellucidis, septatis (articulis 30-50 μ long.), dilute olivaceo-fuscis, ad apicem obtusis, 150-250 × 4-8; peritheciis dense stipatis, sessilibus v. breviter stipitatis, ovato-globosis v. ovatis, superne indistincte ostiolatis, basi late rotundatis, olivaceo-brunneis, tenaci membranaceis, 60-95 μ altis, 50-65 μ latis, plerumque monoascigeris, contextu ex cellulis irregulariter polyedricis 8-11 μ diam. composito; ascis ovato-globosis, aparaphysatis, 35-44 × 30-35; sporidiis parallele positis, ellipsoideo-oblongis, medio 1-septatis et parum constrictis, fuscis, 24-26 × 9-11.

Hab. in foliis languidis Schizostachyi sp. (Graminaceae), Antipolo prov. Rizal, Ins. Philippin. (M. Ramos).

5. **Balladyna affinis** Syd., Ann. Mycol. 14., 1916, p. 74. — Epiphylla, pla- 4624
gulas orbiculares dein plus minus confluentes 2-8 mm. longas griseas tenues formans; mycelio parum evoluto, ex hyphis brevibus dense ramosis fuscis 5-8 μ latis composito, hyphopodiis capitatis numerosis, 18-25 μ longis, 8-10 μ latis, obtusis, integris, cellula basali brevi; hyphopodiis mucronatis non visis; setis mycelicis parcissimis, rectis vel subrectis, simplicibus, apice late rotundatis, tota longitudine pellucidis 100-175 × 7-9, superne saepe leniter tortuosis; peritheciis sparsis, globosis, 100-150 μ diam.; ascis ovato-globosis, 2-3-sporis; sporidiis cylindraceis, obtusis, fuscis, 4-septatis, parum constrictis, 25-30 × 9-12; conidiis obclavatis vel obclavato-fusoideis, basi rotundatis fuscidulis 3-septatis, non constrictis, 30-35 × 9-8, cellula superiore longissima et angusta.

Hab. in foliis Cecropiae (Moraceae), Seringal S. Francisco, Rio Acre, Brasiliae (E. Ule). — Affinis *Ball. amazonicae.*

BALLADYNOPSIS Theiss. et Syd., Ann. Mycol. 15., 1917, p. 475. — 4625
A *Balladyna* differt peritheciis polyascis nec monascis. — Typus *Balladynopsis philippinensis* Syd. (sub *Henningsomyces*).

BALLADYNELLA Theiss et Syd., Ann. Mycol. 15., 1917, p. 478. — 4626
Est *Balladyna* hyphopodiis et setulis destituta. — Typus gen. *Balladynella amazonica* (v. Höhn.) Th. et Syd.

NEOHOEHNELIA Theiss. et Syd., Ann. Mycol. 15., 1917, p. 476. — 4627
Mycelium membranaceum exhyphopodiatum, setulosum. Perithecia ovoideo-erecta, crasse membranacea, nigra, astoma, breviter pedicellata, setulosa. Asci pauci, ex ellipsoidei clavati, octospori. Sporidia phaeodidyma. — Species typica *Neohoehnelia oligotricha* (Mont.) Th. et Syd. (sub *Henningsomyces* v. Höhn.).

HENNINGSOMYCES Sacc. — Syll. XVII p. 689.

1. **Henningsomyces pusillimus** Syd., Philipp. Journ. of Sc., v. 9., Sect. 4628
C., n. 2, 1914, p. 162. — Hypophylla, plagulas orbiculares vel irregulares 1-2 cm. diam. griseo-fumosas formans; mycelio tenuissimo, ex hyphis longiusculis non vel parce ramosis remote septatis (articulis 30-50 μ longis) dilute olivaceo-brunneis tenuiter tunicatis haud hyphopodiatis, 2,5-3,5 μ crassis, composito; peritheciis in mycelio dense sparsis hyphis superficialiter insidentibus, una vel pluribus hyphis suffultis, globosis vel ovato-globosis, sessilibus vel centro brevissime stipitatis, 30-45 μ diam., haud ostiolatis, contextu tenaci obscure olivaceo-brunneo minute parenchymatico ex cellulis 4-5 μ diam. composito, superne setis paucis (4-8) erectis rectis vel subrectis continuis apice acutis fuscis (3-5) in quoque perithecio, globosis usque ovato-globosis, crassiuscule tunicatis, 20-24 μ diam., non vel indistincte paraphysatis, octosporis; sporidiis oblongis, circa medium 1-septatis, vix constrictis, 12-15 μ longis, 3,5-4 μ latis.

Hab. in foliis Adinae sp. (Rubiaceae), Palawan Taytay, Ins. Philipp. (MERRILL).

2. **Henningsomyces philippinensis** Syd., Philipp. Journ. of Sc. v. 9, Sect. 4629
C., n. 2, 1914, p. 161. — Plagulas epiphyllas opacas atras perexiguas 150-300 μ tantum latas vel etiam confluendo majores et usque 2-3 mm. diam. metientes formans; mycelio superficiali, matrici arcte adnato, ex hyphis longiusculis remote septatis (articulis 20-50 μ longis) obscure olivaceo-brunneis vel atro-olivaceis parum ramosis 5-7,5 μ crassis tenuiter tunicatis composito; peritheciis ad latera hypharum mycelii sessilibus vel brevissime stipitatis, plerumque perfecte globosis et 60-70 μ diam., haud ostiolatis, contextu tenaci minute parenchymatico atro-olivaceo, setis paucis (2-6) rectis vel parum flexuosis ad apicem obtusis concoloribus vel pallidioribus plerumque 20-50 μ longis et 5-6 μ latis obsitis; ascis paucis in quoque perithecio, ellipticis, ovatis vel oblongis, subsessilibus, 45-50 μ longis, 22-25 μ latis, octosporis, aparaphysatis vel indistincte

paraphysatis; sporidiis tristichis vel conglobatis, oblongis, utrinque rotundatis, medio vel circa medium 1-septatis et leniter constrictis, ex hyalino brunneis, levibus, 20-25 μ longis, 7,5-8 μ latis.

Hab. in foliis vivis Morindae sp. (Rubiaceae), Palawan Taytay, Ins. Philipp. (MERRILL).

Sect. 3. Hyalophragmiae

SCORIAS Fr. — Syll. I, p. 83.

1. **Scorias paulensis** P. Henn., Hedw. vol. 48 (1908) p. 6. — Mycelio 4630
atro crustaceo, epiphyllo, effuso; hyphis repentibus septatis, radiatis, fusco-atris; peritheciis clavatis vel piriformibus, 150-200 × 30-80, e fibris fuscis compositis; ascis clavatis vel oblongo-ovoideis, 4-sporis, 20-30 × 6-8; sporidiis conglobatis, fusoideis vel clavatis, 3-septatis, hyalinis, 10-12 × 3-3,5. Conidia ovoidea vel ellipsoidea, fuscidula, 1-septata, 5-9 × 3-4.

Hab. in foliis Justiciae sp. (Acanthaceae), S. Paulo, Capital, Brasilia.

2. **Scorias capitata** K. Sawada in Special Rep. Agr. Sper. Station For- 4631
mosa, n. 11, 1915, pp. 123-124, tab. 4 fig. 19-23, t. 4., ii; Mycologia IX, 1917, p. 170. — Mycelio in foliis late effuso nigricante; hyphis catenulatis, fuligineis, 2,5-5 μ cr.; hyphis fertilibus fuligineis, ramosis, forma variabilibus sed plerumque conoideis, cylindraceis, fusoideis v. ellipsoideis, 110-247 × 52-75, apice constrictis et peritheciis terminatis; peritheciis nigris, subovatis v. orbicularibus, 60-83 × 50-78; ascis numerosis clavatis, obtusis, hyalinis, 30-35 × 9-12, 6-8-sporis; sporidiis e fusoideis clavato-fusoideis, utrinque obtusis, hyalinis, 3-septatis, 10-11,5 × 3-3,5.

Hab. in foliis Theae sinensis (Theaceae), Formosa, Japonia (Y. FUJIKURO).

HYPOCAPNODIUM Spegazzini, Notas Mycologicas, « Physis » t. IV, 1918, 4632
p. 287. — Subiculum normale; perithecia subglobosa ostiolata, non v. vix umbonata, hispidula v. hirsuta; asci 8-spori; sporae hyalophragmiae. — *H. setosum* (Zimm.) — Sacc., l. c., XVII, p. 557. Typus.

AITHALODERMA H. et P. Sydow, Ann. Mycol. XI, 1913, p. 257, XV, 1917, p. 474 (Ethym. *aithalos* et *derma* cutis). — Mycelium superficiale, crustaceum, facile secedens, atrum, conidia triposporioidea generans. Pycnidia biformia, alia conica v. conico-globosa, alia la-

geniformia. Pycnidiosporae continuae, minutae, hyalinae. Perithecia conica v. conico-globulosa, minuta, atra, ostiolo plano praedita, contextu parenchymatico, tenaci, coriaceo, superne setis crassis obsita; asci crasse clavati, octospori, aparaphysati. Sporidia transverse pluriseptata hyalina.

1. **Aithaloderma clavatisporum** H. et P. Sydow, l. c. p. 257 fig. III, XV 4633
1917, p. 476, fig. 30, a-d. — Longe lateque effusum, epiphyllum, superficiale, tenuissime pelliculosum, facile secedens, totam folii superficiem obtegens, atrum v. atro-olivaceum, opacum; mycelio rete densissimum efformante, ex hyphis anastomosantibus plerumque longitudinaliter connatis crassioribus 4-6 μ cr. et obscure olivaceis v. brunneis tenuioribus 3-4 μ cr. et plerumque dilutioribus flavis usque flavo-brunneis crebre septatis (articulis 5-10 μ long.) composito, hinc inde conidia triposporioidea plerumque 3-radiata (radiis 28-40 μ long. e 2-septatis) olivaceo-brunnea generante, hyphis paucis etiam in articulos 13-16 μ longos oidiiformiter secedentibus; pycnidiis biformibus, aliis elongato-lageniformibus, 120-400 μ long., 15-20 μ cr., erectis v. parum curvatis, inferne atris opacis, superne saepe dilutioribus et pellucidis, plerumque ad apicem (subinde etiam in medio) abrupte inflatis ibique 25-40 μ cr.; aliis breviter conoideis 60-90 μ diam., olivaceo-brunneolis, contextu tenaci parenchymatico, superne indistincte ostiolatis; sporulis breviter cylindraceis, continuis, hyalinis, utrinque minute guttulatis, 3,5-5 × 1,5-2; perithecis aequaliter sparsis, breviter conoideis, 60-90 μ diam., atris, tenacibus, coriaceis, distincte ostiolatis, parte superiore (praecipue circa ostiolum) setis paucis v. compluribus crassis atris 10-20 μ long. 3,5-5 μ latis subinde elongatis opacis continuis obsitis contextu parenchymatico, olivaceo-brunneo, ex cellulis 6-8 μ diam. formato; ascis subclavatis v. subsaccatis, apice obtusis et incrassatis, basi brevissime stipitatis, 30-36 × 14-20, octosporis, aparaphysatis; sporidiis 3-4-stichis v. conglobatis, clavatis, e basi ad apicem sensim latioribus, 3-4-septatis, subinde etiam 5-septatis, ad septa non constrictis, hyalinis, 24-26 × 5-6.

Hab. in foliis vivis Voacangae globosae (Apocynaceae), Los Baños, ins. Philippinensium (C. F. Baker).

2. **Aithaloderma longisetum** H. et P. Sydow, Ann. Mycol. XII, 1914, 4634
p. 545, XV, 1917, p. 475 fig. 30 h. — Epiphyllum, folii superficiem plerumque omnino crusta tenui facile separabili superficiali obducens, pelliculosum, atrum v. atro-olivaceum, opacum; mycelio rete densissimum efformante, ex hyphis anastomosantibus saepe longi-

tudinaliter connatis crassioribus 5-9 μ cr. fuscis v. olivaceo-fuscis tenuioribus 3-5 μ cr. et plerumque paullo dilutioribus crebre septatis (articulis 6-10 μ long.) composito, hinc inde conidia tripospo-rioidea plerumque triradiata (radiis 30-46 μ long. et 2-septatis) olivaceo-brunnea generante; pycnidiis elongato-lageniformibus 100-200 μ long., 12-20 μ latis erectis v. parum curvatis atro-olivaceis opacis non v. parum inflatis; pycnidiis conicis non visis, peritheciis densiuscule sparsis, breviter conoideis, 60-85 μ diam., atro-olivaceis, tenacibus ostiolatis, setis paucis (1-8) atris v. atro-olivaceis opacis septatis 80-160 μ long. ad basim 4-6 μ crassis superne angustioribus obsitis, contextu parenchymatico obscure olivaceo ex cellulis 7-9 μ diam. formato; ascis subclavatis v. saccato-clavatis, apice obtusis, vix v. brevissime stipitatis, aparaphysatis, 30-36 × 17-19, 8-sporis; sporidiis 3-4-stichis, clavatis, e basi ad apicem sensim latioribus, 2-4 septatis, non constrictis, diu hyalinis, tandem dilutissime olivaceis (praecipue in asco), 20-26 × 4,5-6.

Hab. in foliis Coffeae libericae (Rubiaceae), Lamao pr. Bataan, Luzon Ins. Philippin. (E. D. Merrill). — Ab *A. clavatisporo* Syd. setulis longioribus sporis pallide olivaceis diversum.

CHAETOTHYRIUM Speg. — Syll. IX p. 1061, XVI p. 636, XXII p. 521 Syn., sec. Theissen et Sydow (Ann. Mycol. 15., 1917, p. 477), *Zuckalia* Sacc. 1891, *Chaetasterina* Bubak 1909.

1. **Chaetothyrium colchicum** Woronichin, Les fumagines du Departe- 4635
ment de Sotshi, in Bull. of Applied. Bot., n. 6, p. 797, tab. 136, fig. 976-979. — Mycelio atro, crustaceo epiphyllo, praecipue rectangulariter ramoso; hyphis saepe paralleliter confluentibus vel crustas parenchymaticas formantibus; cellulis hypharum cylindraceis, ad septa constrictis, usque 12-15 μ longis et 6-7 μ crassis, olivaceo-brunneis; peritheciis globosis, leviter compressis, 50-80 μ altis et 60-90 μ latis, crusta parenchymatica hypharum conoidea, ostiolata, corona setarum (8-20) usque 60 μ long. et 7,5 μ crass. unicellularium ornata tectis; ascis late clavatis vel ovalibus, brevissime pedicellatis, 42-52 × 20-30, aparaphysatis, octosporis; sporis clavatis, parallelibus, 22-27 × 6, 4-6-septatis.

Hab. in foliis vivis Ilicis Aquifolii L. (Aquifoliaceae): soc. *Antennulariellae fuliginosae* Woronichin: Caucasus, gub. Tshernomorskaja prope Sotshi (N. Woronichin); in foliis vivis Citri sp. (Rutaceae), Caucasus, gub. Tshernomorskaja, prope Sotshi (Kushke!); in foliis vivis Citri sp, Caucasus, prov. Batum (Kushke!).

2. **Chaetothyrium Rickianum** Theissen, Ann. Mycol. XI, 1913, p. 493, fig. I, XV, 1917, p. 474, fig. 31. — Epiphyllum. Maculis fumosis irregulariter rotundatis 1 cm. circ. diam. quandoque confluentibus; subiculo tenue hinc inde sub lente prominenti-setuloso, hyphis 3-4 μ cr. crebre articulato-constrictis, laxis efformato; setis acutato-incurvatis 20-30-articulatis, plerumque 200-240 μ long.; perithecia aegre visibilia, subiculum elevantia globoso-depressa, usque 200 μ lata 130 μ alta, ostiolo 10 μ lato, hyphis minutis radiantibus ornato-clauso; ascis hymenio basilari efformantibus e cylindraceo clavatis subcylindraceis, 50 × 16 (cum sporidiis 2-3-stichis) v. 65 × 10 (cum sporidiis) (1-2-stichis), aparaphysatis; sporidiis elongato-ellipsoideis hyalinis triseptatis, non constrictis, 12-16 × 3. 4636

Hab. in foliis Dicotyledoneae cujusdam ignotae, Brasilia (Rick).

ZUKALIA Sacc. — Syll. IX p. 431, XI p. 268, XIV p. 17, XVI p. 416, XVII p. 543, XXII p. 42.

1. **Zukalia paraënsis** P. Henn., Hedw. vol. 48 (1908) p. 104. — Maculis mycelii epiphyllis, rotundatis, olivaceo-fuscis; hyphis repentibus ramosis, septatis, fuscis, 4-5 μ crassis; peritheciis gregariis, subglobosis, verruculosis, atris, 30-100 μ diam.; ascis clavatis, obtusis, octosporis, 44-52 × 10-14; sporidiis oblique monostichis vel subparallelis, oblonge clavatis, vertice rotundatis, guttulatis, 3-7-septatis, hyalinis, 20-30 × 3,5-4. 4637

Hab. in foliis Anacardii occidentalis (Anacardiaceae), in horto botan. Goeldi, Parà, Brasilia.

2. **Zukalia caucasica** Woronichin, Les fumagines du Département de Sotshi, in Bull. of Applied Bot. VIII, n. 6, p. 784 (1915), fig. 962-965, tab. 134 fig. 1. — Mycelio atro, late effuso, crustaceo-membranaceo, paginam foliorum superiorem omnino tegente; hyphis brunneis 2-4-stratosis, parce ramosis, praecipue rectangulariter vel cruciatim dispositis; cellulis hypharum cylindraceis vel oblongo-ovalibus, glabris, 18-28 × 6-8 (- 10), nonnunquam globosis, toruloideis; conidiis triposporioideis, 4 (- 3)-radiatis, olivaceis; radiis 5-7-cellularibus superne attenuatis, 65-75 × 12-13,5; peritheciis globosis, parcis, leviter compressis, usque 276 μ diam., membranaceis ostiolatis basi setulis pluricellularibus, 100-150 × 7-10, brunneis ornatis; ascis ovalibus, aparaphysatis octosporis, 60-75 × 30-45; sporidiis hyalinis, fusoideis, obtusis plerumque leviter curvatis, 3-4-septatis, 30-33 × 7-8. 4638

Hab. in foliis vivis Taxi baccatae L. (Coniferae), Caucasus, gub. Tshernomorskaja, prope Chosta (N. Woronichin).

3. **Zukalia erysiphina** Syd., Ann. Mycol. 14., 1916, p. 259. — Mycelio copioso sed tenui, longe effuso, niveo, ex hyphis longissimis, hyalinis, 3-4 μ cr. vix septatis, flexuosis, crasse tunicatis hinc inde geniculatis, non ramosis composito; peritheciis in mycelio copiosis, superficialibus, plerumque lata basi sessilibus, globoso-conicis, mox longioribus quam latioribus, mox e contra latioribus quam longioribus, 50-75 μ diam., astomis, glabris, levibus, contextu unistratoso ex cellulis angulato-globosis, 6-9 μ diam. obscure olivaceo-brunneis v. castaneo-brunneis composito; ascis paucis (circ. 3-6) in quoque perithecio, globosis v. ovato-globosis, sessilibus, aparaphysatis, 20-28 μ diam., ad apicem crasse tunicatis, octosporis; sporidiis conglobatis, oblongis v. clavulatis, 3-septatis, non constrictis, hyalinis, 12-16 × 3,5-4,5. 4639

Hab. in foliis Quercus sp. (Cupuliferae), Shana Odyar, Kumaon Himalaya, Asiae (Butler).

4. **Zukalia lauricola** Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires XXIII p. 38 (1912). — Peritheciis sparsis vel laxe gregariis, superficialibus, udis subglobosis, siccis eximie hemisphaerico-cupulatis, 150-180 μ diam., membranaceo-coriacellis, astomis, glabris, contextu parenchymatico atro vix pellucido, subiculo parcissimo ex hyphis dense intertextis, articulato-toruloideis (articulis 10-25 × 5) chlorino-olivaceis efformato insidentibus; ascis ellipsoideis, utrinque angustatis, basi in pedicellum brevem crassumque productis, octosporis, aparaphysatis, 70 × 18; sporidiis conglobatis, fusoideis, rectis vel leniter inaequilateris, utrinque acutiuscule rotundatis, ad septa valide constrictis, 30 × 6. 4640

Hab. in foliis vivis Ocoteae diospyrifoliae (Lauraceae), in silvis prope Calilegua, Salta: Argentina.

5. **Zukalia transvaalensis** Doidge, Trans. R. Soc. South Afr. V, 1917, p. 721 et 742, t. 58 fig. 10. — Epiphylla, maculas tenues effusas efficiens; hyphis radiatis, ramosis anastomosantibus, 7-8 μ crassis, e cellulis 30-32 μ longis compositis; hyphopodiis unilateralibus, plerumque latioribus quam longis, 8-10 × 11-14; peritheciis sparsis, numerosis, globosis, atris, 130-160 μ diam.; ascis octosporis, ellipsoideis v. ovatis plerumque leniter curvatis, 70-90 × 18-22; paraphysibus nullis; sporidiis distichis v. trifariis, clavatis, hyalinis, 5-septatis, utrinque obtusis, 45-55 × 5-7. 4641

Hab. in foliis Eugeniae Zeyheri (Myrtaceae), Woodbusch,

Zoutpansberg, Africa austr. (E. M. Doidge).

6. **Zukalia setosa** Woronichin, Les fumagines du Département de Sotshi, in Bull. of Applied Bot. VIII, n. 6, p. 788, tab. 134 fig. 5-6, tab. 136 fig. 966 971. — Mycelio griseo, effuso, crustaceo, epiphyllo; hyphis dilute-brunneis vel hyalinis, plerumque 1-stratosis, ramosis, partim rectangulariter, ramulis anastomosantibus vel crustas e cellulis parenchymaticis, 3-4 μ diam. formantibus, setis praeditis; cellulis hypharum plerumque cylindraceis vel oblongo-ovalibus, 7-15 × 3-(5); setis atro-brunneis, rectis vel curvatis, apicibus acutis, 180-230 μ longis, usque 6 μ crassis, hyphis hyalinis usque ad apices setarum arrepentibus, tectis; peritheciis parcis, globosis, ostiolatis statu sicco fere patelliformibus, 220-230 μ diam.; ascis oblongo-ovalibus vel cylindraceis, 60-70 × 15-18; sporis octonis, fusoideis, rectis, hyalinis, 19,5-22,5 × 6-7,5, 4-5 septatis; conidiis triposporioideis, parcissimis, 5-radiatis, radiis 3-4 cellularibus, 20-30 μ longis, supra attenuatis, cellulis guttulatis. 4642

Hab. in foliis vivis Pruni Laurocerasi L. (Rosaceae), Caucasus, gub. Tshernomorskaja, pr. Chosta; in foliis vivis Rhododendri pontici L. (Ericaceae), Caucasus, gub. Tshernomorskaja, pr. Bahukor (N. Woronichin).

7. **Zukalia europaea** v. Höhn., Fragm. zur Mykol. 797, in Sitzgsb. Akad. Wiss. Wien, CXXII, 1, p. 283 (1913). — Subiculo parum effuso ex hyphis 1-pauci-stratosis, brunneolis, 3-8 μ cr., saepe membranaceo-concrescentibus, brevi-cellulosis, subtorulosis guttulatis composito; peritheciis atris, subglobosis, lata basi subiculo insidentibus, 150-200 μ diam., non collabescentibus, ob papillas atras 10-12 μ diam., dense sparsas scabris, in acervulos parvos congestis, ostiolo minuto obsoleto, contextu paucistratoso, e cellulis rotundato-polyhedricis, usque ad 12 μ diam. composito; ascis copiosis, sessilibus, aparaphysatis, fusoideo-clavatis, apice attenuato-rotundatis, 42-58 × 8-12, octosporis; sporidiis 2-3-stichis, oblongo-fusoideis, rectis, utrinque acutiusculis et gelatinoso-apiculatis, 4-cellularibus, hyalino-chlorinis, 16-20 × 4-5,5. 4643

Hab. in pagina superiore foliorum Rubi fruticosi (Rosaceae), Sonntagsberg, Austria infer. (Strasser).

8. **Zukalia nantoensis** K. Sawada, Mycologia 9., 1917, p. 251 (ex Rep. Agricult. Stat., Taiwan (Formosa) Mart. 1915, p. 123, tab. 4 fig. 14-18). — Pycnidiis et peritheciis epiphyllis, raro hypophyllis in subiculis 2-5 mm. latis, lichenoideis, ex hyphis fuligineis, crasse tunicatis, 8 μ cr. septatis coalescentibus formatis; hyphopodiis ob- 4644

longis, substipitatis 18-25 μ long. intermixtis; pycnidiis globulosis, nigris, sessilibus v. substipitatis, subiculo insertis, 63-95 μ diam.; sporulis ellipsoideo-oblongis, levibus, pallide brunneis, 1-cellularibus, 2-guttatis, 6-8 × 3-4; peritheciis similibus 130-180 μ diam.; ascis copiosis oblongo-clavatis, v. ovoideo-oblongis, 33-50 × 10-12, octosporis; sporidiis oblongis v. breviter clavatis, medio 1-septatis, hyalinis, utrinque obtusis, 9-13 × 3,5-5.

Hab. in foliis Theae sinensis (Theaceae) cui valde noxia, in Ins. Formosa, pluribus locis.

9. **Zukalia Theae** K. Sawada, Special Rep. Agr. Exp. Station Formosa, n. 11, 1915, p. 122, tab. 4 fig. 10-13, t. 4., ii; Mycologia, IX, 1917, p. 170. — Peritheciis globosis, nigris, 67-135 μ diam.; subiculo nigro; hyphis filiformibus, primum pallidis, dein brunneis, ramosis, septatis, 3-6 μ cr.; ascis numerosis, setis 6-8 obscure brunneis, obtusis, 5-6 septatis, circumdatis, 70-100 × 4; ascis octosporis, hyalinis, clavatis, fusoideis, 68-90 × 13-16; sporis hyalinis, obovatis, ellipsoideis v. clavatis, 3-septatis, 17-23 × 6-7. 4645

Hab. in foliis et ramulis Theae sinensis (Theaceae), Formosa, Japonia (K. Sawada).

LIMACINIA Neger. — Syll. XIV p. 474, XVI p. 1127, XVII p. 556, XXII p. 62. — Syn. sec. Theissen et Sydow (Ann. Mycol., 15., 1917, p. 478), *Xystozukalia* Theissen, 1916, Verh. zool.-bot. Ges. Wien, p. 357.

1. **Limacinia spongiosa** Arnaud, Ann. École nat. Agric. Montpell. X, 1911, p. 325, icon. p. 282. — Subiculo ramicolo, nigro, spongioso, 1-5 mm. crasso; peritheciis in mycelio immersis vel erumpentibus, minutis, 150 μ diam., globosis, setosis; ascis tereti-clavatis, 8-sporis, aparaphysatis, plerumque 70 μ longis; sporidiis ellipsoideo-fusoideis, 3-septatis, dilute fuscidulis, 20-26 × 6-9, non v. vix constrictis. 4646

Hab. in ramis Nerii Oleandri (Apocynaceae), Montpellier Galliae merid.

2. **Limacinia biseptata** Sacc., Ann. Mycol. XIII, n. 2 (1915) p. 127.— Effusa, imprimis epiphylla, tenuis, confluens, castaneo-olivacea (vix capnodiacea) non vere secedens; hyphis repentibus filiformibus, parce ramosis, dilute fuligineis, 4-5 μ cr., obsolete septatis, guttulatis; peritheciis, globulosis, superficialibus ex hyphis orientibus, demum latiuscule apertis nigricantibus, 90-100 μ diam.; ascis clavulatis, subsessilibus, apice subinde obtuse abrupteque tenuatis, 90-100 × 9, non v. obsolete paraphysatis, octosporis; sporidiis di- 4647

stichis tereti oblongis, curvulis utrinque rotundatis, 16 × 4,5-5, dilutissime brunneolis, 2-septatis, non constrictis; ceratopycnidiis peritheciis intermixtis, cylindricis, nigris, 300-400 × 80, sursum sensim cuspidatis, vel apice inflatis, pertusisque; sporulis non visis.

Hab. in foliis emorientibus Macarangae sp. (Euphorbiaceae), Los Baños, Ins. Philipp. (BAKER). — Mycelii colore et sporidiis biseptatis videtur species distincta.

3. **Limacinia imperspicua** Sacc., Notae Myc. XXIII, p. 62 (Acc. Ven. Trent. 1917). — Epiphylla, maculas subrotundas 3-5 mm. diam. nigricantes sed fere imperspicuas formans; peritheciis subglobosis, leviter papillatis, nigris, 80-90 μ d., mycelio filiformi intricato adpresso, fuligineo insertis, contextu sinuoso atrofuligineo; ascis oblongis, sessilibus, apice rotundatis, 40 × 14, aparaphysatis, 8-sporis; sporidiis distinctis, cylindraceis, curvulis (fere allantoideis), 4-septatis, utrinque obtusulis, non constrictis, 14-16 × 3,5; ceratopycnidiis interspersis e basi bulbosa cylindraceis sursum tenuatis sed summo apice obtusis, 190-200 × 12, apice tantum 6 μ cr., aterrimis (hucusque sterilibus inventis). 4648

Hab. in foliis languidis Celtidis sp. (Ulmaceae), Los Baños, Ins. Philipp. — Habitus vix capnodiaceus, sed ejus characteres adsunt.

Sect. 4. Phaeophragmiæ

CAPNODIUM Mont. — Syll. I p. 73, IX p. 438, XI p. 270, XIV p. 476, XVII p. 555, XXII p. 59. — Syn. *Polychaeton* O. Ktze 1891 (sec. Theissen et Sydow, Ann. Mycol. 15., 1917, p. 473).

1. **Capnodium juniperinum** Baccarini, F. Eritr. II, n. 72 in Annali di Bot. 1917. — Mycelio fusco-nigro, ramoso articulato, articulis subglobosis, saepius 9-12 μ latis, conidia brunnea simplicia, didyma vel triseptata pleurogena gignentibus; spermogoniis subhaemisphaericis a 54 ad 90 μ latis; spermatiis hyalinis ellipticis 4-8 μ; pycnidiis lageniformibus atro-brunneis, ore hyalino fimbriato, levibus, tunc piriformibus atque sessilibus, 270 × 81, tunc pedunculatis 720 × 90; sporidiis vero conformibus, bi-tri-septatis, loculis interdum septo longitudinali percursis, 6,4-11,8 μ. Perithecia ascophora non visa. 4649

Hab. in Junipero procera (Coniferae), ad Addinifas Sihid in Erythraea, Africa or.

2. **Capnodium Tanakae** Shirai et Hara, ? 1917, Morb. Arbor. fruct. Jap. p. 239 fig. 31; 3,3,4. — Mycelio late effuso, tomentoso, crasso, folia 4650

fructusque obducente ; peritheciis cylindraceis, simplicibus v. ramosis apice globoso-inflatis, membranaceis, 70-100 μ diam., deorsum carbonaceis, atro-brunneis ; ascis clavatis v. subfusoideis, 8-sporis, 30-45 × 10-12 ; sporidiis biseriatis fusoideis v. ellipsoideis, 3-septatis, atro-brunneis, 10-15 × 4-5.

Hab. in foliis fructibusque Citri aurantiacae (Rutaceae), in Japonia.

CAPNOPHAEUM Spegazzini, Notas Mycologicas, « Physis » t. IV, 1918, 4651
p. 287. — Subiculum normale ; perithecia subglobosa ostiolata, non v. vix umbonata, hispidula v. hirsuta ; asci 8-spori ; sporae phaeophragmiae. Typus, *C. indicum* (Brn.). — Sacc., l. c., XXII, p. 64.

METACAPNODIUM Spegazzini, Notas Mycologicas « Physis » t. IV. 4652
1918, p. 288. — Subiculum normale ; perithecia subglobosa ostiolata, non v. vix umbonata, glabra ; asci 8-spori ; sporae phaeophragmiae.—Typ., *M. juniperi* (Phl. et Plwr.). — Sacc., Syll. Fung. IX p. 438.

SETELLA Syd., Ann. Mycol. 14., 1916, p. 359 (Etym. *seta*), XV, 1917, p. 477. — Perithecia superficialia, globulosa vel conoidea, astoma, submembranacea, atra, mycelio proprio parco vel subnullo, ad apicem setulâ longissimâ praedita, parenchymatice contexta. Asci 4-8-spori, aparaphysati. Sporidia ellipsoideo-oblonga, ex hyalino colorata, pluriseptata.

1. **Setella disseminata** Syd., l. c. — Epiphylla ; peritheciis per totam 4653
folii superficiem immutatam aequaliter densissimeque distributis, exiguis, conoideo-globulosis vel late breviterque conoideis, 45-70 μ diam., basi hyphulis brevibus torulosis viridulis vel olivaceis 4-5 μ crassis cinctis, mycelio distincto proprio subnullo, superficialibus, astomis, submembranaceis, parenchymatice e cellulis obscure olivaceis ca. 10 μ diam., contextis, ad apicem setulam singulam (raro setulas duas) gerentibus ; setula 250-350 μ longa, basi 7-9 μ lata, apicem versus sensim attenuata, summo apice 3-4 μ lata sed obtusa, obscure brunnea, superne saepe dilutiore, septata (articulis 30-50 μ longis), semper recta, erecta ; ascis sessilibus, ovatis vel oblongis, aparaphysatis, 4-8-sporis, 40-65 × 20-30 ; sporidiis 2-vel saepius 3-stichis, ellipsoideo-oblongis, rectis vel saepe leniter inaequilateris, 3-septatis, non constrictis, primo hyalinis, in maturitate fuscidulis et subinde ad septum medium leniter constrictis, utrin-

que obtusis, 20-30 × 9-10, loculis extimis plerumque minoribus.

Hab. in foliis vivis v. languidis Schizostachyi acutiflori (Graminaceae), Los Baños ins. Philipp. (S. A. Reyes), et Gigantochloae Scribnerianae, Los Baños (C. F. Baker).

PHRAGMOCAPNIAS Theiss. et Syd., Ann. Mycol. 15., 1917, p. 480.— Est *Limacinia* sporidiis brunneis donata.

1. **Phragmocapnias Betle** (Syd. et Butl.) Theiss. et Syd., Ann. Myc. 4654
15., 1917, p. 480, *Capnodium Betle* Syd. et Butl., Ann. Mycol. IX, 1911, p. 384. — Amphigenum, late effusum, atrum, crustaceo-pelliculosum; mycelio fusco, dense intricato-ramoso, ex articulis cylindraceis leniter constrictis 3,5-6 μ cr. formato; conidiis Cladosporio similibus; pycnidiis erectis, usque ad 350 μ altis, cylindraceis, simplicibus parte media 15-25 μ cr., parte inferiore expansis, apice dilutioribus late ellipticis et 50 μ cr., poro pertusis; pycnidiosporis hyalinis, oblongis, continuis, dein plerumque 1-guttulatis septatisve, 4-10 × 2-4; peritheciis subhemisphaericis, atris, ostiolatis, 100-135 × 90-110; ascis clavatis, pedicellatis, plerumque 6-sporis; sporidiis fusoideis, 4-6-septatis, diu hyalinis, dein fuscis, 20-25 × 3-5.

Hab. in foliis Piperis Betle (Piperaceae), Dacca (A. L. Som), Muden, Amherst District Burma, Indiae orient. (E. J. Butler).

Sect. 5. Hyalodictyae

PHAEOSACCARDINULA P. Henn. 1905, Syll. XVII p. 873, XXII p. 553. Syn. sec. Theissen et Sydow (Ann. Mycol. 15., 1917, p. 480); *Limacinula* (Sacc. Syll. XVII p. 558, XXII p. 63); *Phaeopeltis* Clements, Genera of Fungi 1909 p. 52; *Tephrosticta* Syd., Ann. Mycol. 1904 p. 162 (ut Subgen.), Syll. XVII p. 745, Philipp. Journ. of Sc., C. Bot., VIII, 1913, p. 271; *Capnites* Theissen, Verh. zool.-bot. Ges. Wien, 1916, p. 353. — Typus gen. *Phaeosaccardinula diospyricola* P. Henn.

1. **Phaeosaccardinula Malloti** (Rehm) Theissen, in Theissen et Sydow, 4655
l. c. p. 481, *Limacinula Malloti* Rehm, Ascomyc. Philipp. III, in Philipp. Journ. of Sci. VIII (1913) p. 395. — Mycelio tabacino-fusco, totam superiorem foliorum paginam obducente, faciliter secedente, membranaceo, cellulis fuscidulis 10-14 × 6-7 arcte seriatis contexto, glabro; peritheciis plus minusve gregariis, membranaceis, globulosis, glabris, atris, poro minutissimo pertusis, 200 μ diam., siccis

apice collabentibus; ascis ovatis, 50 × 20-25, aparaphysatis, octosporis; sporidiis distichis, oblongis, utrinque obtusis, transverse 3-5-, longitudinaliter 1-septatis, hyalinis, 20-24 × 10-12.

Hab. in foliis Malloti philippinensis (Euphorbiaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (C. F. Baker). — *L. javanicae* Zimm. proxima; differt tantum sporidiis minoribus.

2. **Phaeosaccardinula Butleri** (Sydow) Theiss. et Sydow, l. c. p. 451, 4656
Limacinula Butleri Sydow in Syd. et Butl., Ann. Mycol. IX, 1911, p. 385. — Mycelio atro, late effuso, crustaceo-membranaceo, paginam foliorum superiorem saepe omnino tegente, ex hyphis fuscis septatis, aliis repentibus 5-7 μ cr. et setis atris simplicibus acutis usque ad 180 μ long. inferne 8-9 μ cr. praeditis, aliis majoribus longiusculis plus minus erectis simplicibus vel parce ramosis usque 13 μ cr. ad septa plus minusve constrictis composito; conidiis (e genere Triposporio) 3-4-radiatis, radiis singulis 4-6-locularibus superne attenuatis usque 70 μ long., basi usque 15 μ latis; pycnidiis erectis, dimorphis, aliis 150-250 μ alt. circa 18-24 μ cr., cylindraceis, aliis brevioribus sed latioribus ad basim usque 55 μ latis superne attenuatis; pycnidiosporis hyalinis, continuis, 3-3,5 × 1-1,5; peritheciis ovato-globosis, dein depressis, in sicco collabescentibus, poro minuto pertusis, 150-200 μ diam.; ascis ovatis, clavatis v. cylindraceo-clavatis, 60-85 × 25-32, octosporis; sporidiis oblongis v. ellipticis, saepe leniter inaequilateris, hyalinis v. subhyalinis, utrinque rotundatis, transverse 3-6 septatis, longitudinaliter 2-3-septatis, 24-32 × 10-11.

Hab. in foliis Artocarpi mysorensis (Moraceae), Vayitri, Wynaad, Indiae or. (E. J. Butler).

3. **Phaeosaccardinula Theae** (Sydow) Theiss. et Butl., l. c. p. 481, *Limacinula Theae* Syd. et Butl., Ann. Mycol. IX, 1911, p. 386, fig. 6.— 4657
Mycelio atro, effuso, crustaceo-membranaceo, paginam foliorum superiorem plerumque omnino tegente, ex hyphis fuscis septatis, aliis repentibus ca. 5 μ cr. et setis atris simplicibus acutis usque ad 130 μ long. inferne 8 μ cr. praeditis, aliis majoribus erectis ramosis ad 10 μ cr.; conidiis (e genere Triposporio) stellatim 4-radiatis; pycnidiis erectis dimorphis, aliis usque ad 300 μ altis cylindraceis medio inflatis ibique usque ad 22 μ cr. superne attenuatis, aliis late cylindraceis c. 80 μ altis et 30 μ latis; pycnidiosporis cylindraceis, rectis, hyalinis, continuis 2,5-3 × 1,5; peritheciis ascigeris superficialibus, globosis, dein depressis, poro pertusis, 150-225 μ diam.; ascis subsessilibus, ovoideis, octosporis; sporidiis oblongis,

utrinque rotundatis, hyalinis, murali divisis, transverse plerumque 5-septatis, septo uno longitudinali percursis, 25-33 × 9-11.

Hab. in foliis ramulisque Camelliae Theae (Theaceae), Rungmook, Darjeeling, Indiae or. (G. Watt). — *Lim. javanicae* (Zimm.) v. Höhn. proxima.

LIMACINULA Sacc. — Syll. XVII p. 558. XXII p. 63.

1. **Limacinula caucasica** Woronichin, Les fumagines du Département de Sotshi, in Bull. of Applied Bot. VIII, n. 6, p. 793, tab. 134, fig. 4., tab. 136 fig. 972-975. — Mycelio tenui inter hyphas *Zukaliae caucasicae* intricato, ex cellulis dilute-brunneis praecipue ovalibus, rarius cylindraceis, 7-10 × 3-4 constructo; hyphis ramosis, praecipue rectangulariter, saepe crustas parenchymaticas formantibus; peritheciis globosis parenchymaticis, membranaceis, leviter compressis, statu sicco fere patelliformibus, ostiolatis, 220-230 μ diam.; ascis oblongo-ovoideis, aparaphysatis, 45-75 × 18-30; sporis fusoideis, rectis vel curvatis, 30-45 × 5-7-(-9) apiculatis, septis 8-11 transversis vel obliquis, et longitudinale, 1-3 loculos dividente, instructis, pycnidiis elongatis, rectis, supra medium inflatis ibique 30-35 μ crassis, apicibus fimbriatis, 540-650 μ longis, 25-35 μ crassis. 4658

Hab. in foliis vivis Taxi baccatae L. (Coniferae), soc. *Zukaliae caucasicae* Woronichin., Caucasus gub. Tshernomorskaja, pr. Chosta, (N. Woronichin).

2. **Limacinula Salicis** (Arn.) Sacc. et Trotter, *Teichospora Salicis* Arnaud, Ann. École Nat. Agric. Montpell. X, 1911, p. 325 et icon. p. 266. — Peritheciis ramicolis, minutis, 200 μ diam., globosis, sparsis, superficialibus depresse ostiolatis, nigro-nitidis, subiculo fumagineo insidentibus; ascis clavato-cylindraceis, aparaphysatis, 8-sporis; sporidiis ellipsoideo-fusoideis, fuscidulis, non constrictis, utrinque breviter mucronatis, transverse 5-septatis, 25-30 × 8-10, loculis pluribus longitrorsum 1-septatis. 4659

Hab. ad ramos Salicis cinereae (Salicaceae), prope Montpellier, Galliae merid. — Ob subiculum ex icone vere fumagineo potius *Limacinulae* species.

3. **Limacinula cupularis** Patouillard, Bull. Soc. Mycol. de Fr., XXXIV, 1918, p. 89. — Mycelio brunneo-nigro, crustam membranaceam tenuem separabilem totum folium obtegentem efformante; hyphis brunneis, cylindraceis, septatis ramosis 5-8 μ cr., hinc inde moniliformibus, ex articulis ellipsoideis 15-20 × 8-10 efformatis, levibus; pycnidiis non visis; peritheciis sessilibus superficialibus globosis 4660

dein depresse cupulatis, levibus, 250-300 μ diam., coriaceis, nigris, e cellulis angulosis brunneis circ. 6-12 μ cr. efformatis ; ostiolo centrali rotundato, circa 50 μ cr., filis evanidis incoloribus radiantibus circumdato; ascis breviter stipitatis ovoideo-clavatis, aparaphysatis, inordinate 6-8 sporis, circ. 75 × 33; sporidiis oblongis, utrinque rotundatis diu incoloribus et hyalinis, demum rubro-olivaceis, ad septa vix constrictis, 42-60 × 16-20, 8-15 transverse septatis, septis verticalibus 3-4 praeditis.

Hab. in foliis arboris cujusdam ignoti, in Ins. Madagascar (Viguier). — Potius *Phaeosaccardinula.*

Sect. 6. Phaeodictyae

COCCODINIUM Massal., Atti Ist. Ven. Sc., Lettere ed Arti, Ser. III, v. 5., Venezia 1860, p. 336. — Syn. *Naetrocymbe* Körb. 1865, Syll. XXII p. 67. — Verisimiliter nomen körberianum anterius (Lich. sel. germ. 1858, n. 58) et tunc servandum. 4661

Sect. 7. Scolecosporae

PSEUDOMELIOLA Speg. — Syll. IX p. 938, XI p. 269, XVI p. 1127, XXII p. 57.

1. **Pseudomeliola placida** Syd., Leafl. Philipp. Bot., IV, 1911, art. 62, p. 1154. — Perithecis hypophyllis, maculas minutas, 1-2 mm. diam., fuscas formantibus, mycelio parco ex hyphis fuscis irregulariter ramosis 6-10 μ crassis composito insidentibus, glomerulatis superficialibus, ovatis vel ovato-elongatis, 250-300 μ altis, 150-200 μ latis, subcarbonaceis, distincte papillatis, obscure brunneis ; ascis cylindraceis, breviter pedicellatis, 70-130 μ longis, 7-10 μ latis, cotosporis ; sporidiis filiformibus, pluries guttulatis, 60-100 μ longis, 1,5-2,5 μ crassis, hyalinis, saepe leniter curvulis ; paraphysibus numerosis, hyalinis, filiformibus, ca. 1 μ crassis. 4662

Hab. in foliis vivis Semecarpi Perrotteti (Anacardiaceae), Todaya, Ms. Apo, Distr. Davos, ins. Mindanao, in Philipp. (Elmer).

OPHIOCAPNODIUM Spegazzini, Notas Mycologicas « Physis », t. IV, 1918, p. 286.— Subiculum normale; perithecia subglobosa, ostiolo, cylindraceo praelongo praedita; asci 8-spori ; sporae lineares pluriseptatae olivaceae. — Typus *O. Usterii* (Speg.) Speg.— Sacc., l. c., XXII, p. 57. 4663

ACTINOCYMBE v. Höhn., Fragm. z. Mykol. n. 690 (1911). — Theissen 4664
et Sydow, Ann. Mycol. 15., 1917, p. 478. — Mycelium dematiaceum membranaceum, setulosum. Perithecia insidentia, arescendo depressa, distincte ostiolata, polyasca. Sporidia elongato-cylindracea, subfiliformia, hyalina pluriseptata. — Typus sistit *Actinocymbe separato-setosae* (P. Henn.) v. Höhn. (*Actiniopsis* P. Henn., Syll. XXII p. 531).— Cl. v. Höhnel cum hoc gen. et compluribus affinibus (sed sporologice dissimilibus) gregem novum condidit:

Naetrocymbeae v. Höhn. 1909, Fragm. z. Mykol. VIII, n. 379 in Sitzb. k. Ak. d. Wiss. Wien, math.-naturw. Kl., Bd. 118, Abt. I, p. 1200.

A. Setosae

1. Sporidia bilocularia	Chaetothyrina Theiss.
2. » quadrilocularia	Chaetothyrium Speg.
3. Sporidia transverse multilocularia	Zukalia Sacc.
4. » » »	Actinocymbe P. Henn.
5. » muralia	Treubiomyces v. H.

B. Non setosae

6. Sporidia transverse multilocularia	Xystozukalia Theiss.
7. » muralia	Phaeosaccardinula P. Henn.
8. » »	Naetrocymbe Körb.

Syn. Chaetothyrieae Theissen, Ann. Mycol. 11., 1913, p. 496.

I. Sporidia hyalina unilocularia	Chaetothyrina Theiss.
II. Sporidia hyalina quadrilocularia	Chaetothyrium Speg. (Syn. Malmeomyces Starb.)
III. Sporidia hyalina muralia	Treubiomyces v. Höhn.

Subfam. 6. **Parodiellineae** Arnaud,

Ann. d. Épiphyties, t. VII, 1919-1920 (1921), p. 4.

I. Mycelium externum nullum

1. Stroma pluriloculare: Trib.	**Bagnisiopsideæ** Arn.
Gen. unicum	Bagnisiopsis Th. et Syd.
2. Stroma uniloculare: Trib.	**Parodiellineæ** Arn.
a) Perithecia stromate late adnata; sporidia unilocularia . . .	Parodiellina (P. Henn.) Arn.
b) Perithecia pedicello tenui stromate pulvinato connexa; sporidia bilocularia	Chevalieria Arnaud

II. Mycelium externum praesens plerumque copiosum

1. Perithecia appendicibus destituta, mycelio colorato quandoque setuloso, mycelio interno evoluto (sp. phaeodidymae v. phaeophragmiae): Trib. . . . . **Parodiopsideæ** Arn.

a) Phaeodidymae . . . PARODIOPSIS Maubl.
b) Phaeophragmiae . . . PERISPORINA P. Henn.
c) Scolecosporae v. subscolecosporae . . . NEMATOTHECIUM Syd.

BAGNISIOPSIS Th. et Syd., Ann. Mycol. XIII, 1915, p. 291 (in Dothideaceis). — Stroma pulvinatum, erumpens, dothideoideum, loculis immersis (v. vertice subliberis). Asci paraphysati, octospori. Sporidia hyalina simplicia.

1. **Bagnisiopsis rhoina** (Syd. et Hara) Theiss. et Sydow, Ann. Mycol. 4665
XIII, 1915, p. 293, *Bagnisiella rhoina* Syd. et Hara, l. c. X, 1912, p. 408. — Stromatibus erumpentibus, peridermii laciniis arcte cinctis, irregulariter distributis, globulosis vel ellipticis, 0,5-1 mm. longis, atris, superficie ob loculos prominulos rugosis; loculis 4-10 in quoque stromate, globulosis, 140-200 μ diam.; ascis clavatis, apice rotundatis ac crasse tunicatis, 85-105 × 17-19, octosporis, brevissime stipitatis, filiformiter paraphysatis; sporidiis oblongis, uno fine saepe latioribus, continuis, hyalinis, minute guttulatis, utrinque rotundatis, 20-24 × 6-10, rectis, distichis.

Hab. in ramis Rhois silvestris (Anacardiaceae), pr. Mino, Kawauye-mura, Japonia (K. HARA).

2. **Bagnisiopsis Dioscoreae** Wakefield, Bull. Misc. Inf. Kew, 1918, p. 4666
201 cum icon. — Stromatibus erumpentibus sublineari-elongatis, pulvinatis superficie ob loculos prominulos rugosis, atris, 1 mm. diametro, contextu pseudoparenchymatico. Loculis numerosis globosis ad 500 μ diametro. Ascis cylindraceis, apice rotundatis, brevissime stipitatis, octosporis, 120-135 × 12-15. Paraphysibus filiformibus, 2,5-3 μ diam. ascos aequantibus. Sporidiis monostichis, oblongis, utrinque obtusis, hyalinis, interdum polari-guttulatis, 17-18 × 7-8,5.

Hab. in caulibus petiolisque Dioscoreae prehensilis (Dioscoreaceae), Okigwi in Nigeria infer., Africa trop. (C. O. FARQUHARSON, TALBOT et OBAN).

3. **Bagnisiopsis tijucensis** Theiss. et Syd., l. c. — Hypophylla. Stromate 4667
nigro opaco rotundato usque 0,8 mm. diam., 0,4-0,45 mm. alto depresse pulvinato v. noduloso macula colore vinosa limitato et epi-

dermide rupta cincto; superficie muriculata; contextu rubro-brunneo subprosenchymatico; loculis immersis 250-350 μ diam., parietibus propriis nullis, superficialiter ore periphysibus circumdato apertis; ascis paraphysatis, p. sp. 85-100 × 9-12; sporidiis monostichis, hyalinis (coacervatis leniter flavescentibus), 13-16 × 6-8, ellipsoideis, continuis.

Hab. in foliis Tibouchinae v. Leandrae sp. (Melastomataceae), Serra do Itatiaia R. de Janeiro, Brasilia (DUSÉN).

CHEVALIERIA G. Arnaud, C. R. Ac. Sc. Paris t. 170, 1920, p. 203 4668
(Etym. e CHEVALIER qui fungus collegit). — Perithecia in stromate emergenti disposita; asci aparaphysati; sporidia bilocularia.

Huic pertinet *Dimerosporium ctenotrichum* Har. et Pat. et tunc *Chevaliera ctenotricha* (Har. et Pat.) Arnaud vocandum.

PARODIOPSIS Maublanc in Arnaud., Not. Mycol. 1915, p. 22; Asterinées I, 1918, p. 21, Ann. Serv. Epiphyt. I, 7., 1919-1920, p. 56.— A gen. *Parodiella* et *Parodiellina* mycelio externo praesenti diversum. Sporidia bilocularia. — Sec. Arnaud, l. c. (1919-1920) p. 57, ad gen. *Parodiopsis* Maubl. spectant etiam: *Chrysomyces* Th. et Syd., *Schistodes* Th., *Hypoplegma* Th. et Syd., *Perisporiopsis* P. Henn., *Piline* Th.

1. **Parodiopsis melioloides** (Wint.) Arnaud, Ann. Service Epiphyt. t. 7., 4669
(1919-1920), p. 58, tab. V.— Syn. *Parodiella consimilis* P. Henn. Cl. Arnaud (l. c.) in hac species diffusa formas novas sequentes distinguit.

a) typ. in Myrtaceis.
b) *Monimiaceae*, Brasilia in Monimiaceis.
c) *Clusiaceae*, Equatoria in Clusiaceis, status conid. tantum notum est *Exosporina Clusiaceae* Arn.
d) *Luheae*, Brasilia, in Tiliaceis (Luhea).
e) *Meliaceae*, America austr., in Meliaceis (Cabralea).
f) *Anacardii*, America austr., in Anacardiaceis (Anacardium, Tapiria etc.).
g) *Erythroxyli*, Brasilia, in Erythroxylaceis (Erythroxylon pulchrum).
h) *Erythrinae*, Brasilia, in Papilionaceis (Erythrina).
i) *Cordiae*, America austr., in Cordiaceis (Cordia).

2. **Parodiopsis Perae** Arnaud, Ann. Service Epiphyt. t. 7. (1919-1920), 4670
p. 57, 59 fig. 5-6, tab. IV. — Mycelio valido, brunneo-rubescenti, se-

tulis mycelicis simplicibus praedito, haustoriis convolutis majusculis; peritheciis coriaceo-carnosis, infra stromaticis, parietibus crassiusculis donatis, obscure latericiis v. subcinnabarinis, 230 μ diam., ostiolo parum definito; ascis clavatis e disco sterili exurgentibus, aparaphysatis; sporidiis immaturis hyalinis, bilocularibus, 36 × 12, demum brunneis.

Hab. in Euphorbiaceis plurimis: Pera Leandrum, Brasilia et Peru, Alchornea Iricurana, America austr., Hevea sp., Brasilia, Manihot sp., Peru, et in Euphorbiaceis indet. ex Africa trop., America austr.; forma conidica in Sapio abyssinico (*Exosporium lateritium* Syd.), Amani, Africa or.

NEMATOTHECIUM Syd. in Leaflets of Philipp. Bot. V (1912) p. 1534.— (Etym. *nema*, filum vel hypha et *theca* pro perithecio, ob contextum peritheciorum hyphosum). — Perithecia in subiculo copiose evoluto superficialiter insidentia, globulosa, astoma, irregulariter dehiscentia, molliuscula, fusco-brunnea, contextu haud parenchymatico sed ex hyphis formato. Asci cylindracei, octospori, copiose paraphysati. Sporidia elongata, subfiliformia, pluriseptata, colorata.

1. **Nematothecium vinosum** Syd., loc. cit. — Plagulas hypophyllas ro- 4671
tundatas vel irregulares vinosas 0,5-2 cm. latas efformans, in mycelio *Meliolae* parasitans; mycelio repente, hyphas *Meliolae* dense ambiente, ex hyphis densissime intertextis et connatis anastomosantibus, rete densum formantibus, primo subhyalinis dein fuscis, tenuibus, 1,5-2 μ tantum crassis vel usque ad 3-4 μ, saepe projectiones breves valde irregulares plerumque incisas vel acute lobatas gerentibus composito; peritheciis numerosis in quaque plagula, laxe dispositis vel subinde aggregatis, globosis vel globoso-depressis, 200-300 μ diam., molliusculis, brunneis vel vinoso-brunneis, astomis, irregulariter dehiscentibus, ambitu hyphis mycelii cinctis, contextu ex hyphis densissime intertextis et connatis composito; ascis fasciculatis, cylindraceis, apice rotundatis, haud incrassatis, rectis vel curvulis, subsessilibus, 65-90 × 10-14, octosporis, paraphysibus copiosis, ascos aequantibus vel superantibus, superne varie curvis ramosisque hyalinis, 1,5-1,75 μ cr.; sporidiis parallele positis, subfiliformibus vel filiformi-fusoideis, plerumque sigmoideo-curvatis, utrinque attenuato-acutiusculis, primo multiguttulatis dein 6-10-septatis, olivaceo-brunneis, 60-75 × 3-4.

Hab. parasiticum in mycelio Meliolae ad folia Eugeniae incarnatae, Puerto Princesa, Palawan, ins. Philipp. — Fun-

gus valde curiosus, inter Perisporiaceas locandus, Aspergillaceis quoque affinis.

Fam. 2. **Microthyriaceae** Sacc.

Cum Microthyriaceis sensu ampliore, convenit novum Ordo **Hemisphaeriales** Theissen (Ann. Myc. 1913 p. 468; Mycol. Centralbl. III, 1913, p. 273-286, 4 icon. 1 tab.), cuius caracteres et dispositio synoptica sec. Theissen et Sydow (Ann. Mycol. 15., 1917, p. 396) haec est *):

Perithecia v. ascomata dimidiato-scutata, libera v. basi hypostromate in epidermide radicata

A. Scutellum radiatim constructum	
a) Mycelium filiforme v. nullum	
I. Perithecia adnata	
1. Perithecia subcuticularia	*Stigmateaceae*
2. Perithecia superficialia, hypostromate adnata	*Polystomellaceae*
II. Perithecia et mycelium superficialia libera	*Microthyriaceae*
b) Mycelium radiante membranaceum	*Trichopeltaceae*
B. Scutellum non radiatim constructum	*Hemisphaeriaceae*

Subfam. 1. **Stigmateae**

Conspectus Generum Stigmatacearum secundum Theissen, et Theissen et Sydow:

Fam. 1. **Stigmateaceæ**

Ann. Mycol. 14., 1916, p. 426; Theiss. et Sydow, Ann. Myc. 15., 1917, p. 399.

A. Ascomata disco ascigero basi praedita Eustigmateae Th. et Syd.

I. Scutellum distincte radiatum	
a) Mycelium praesens liberum; sporidia muralia	Vizella Sacc.
b) Mycelium nullum	
1. Sporidia brunnea continua	Entopeltis v. H.
2. Sporidia hyalina didyma; ascomata elongata	Leptopeltis v. H.
3. Sporidia brunnea didyma	Stigmatea Fr. = Hormotheca Bon.
4. Sporidia hyalophragmia	Stigmatodothis Syd.
II. Scutellum fere totum pseudoparenchymaticum; mycelium nullum; sporidia brunnea didyma	

*) Cnfr. etiam: Arnaud in C. R. Ac. Sc. Paris, t. 159, 1914, p. 807, t. 164., 1917, p. 574 et p. 888.

a) Ascomata setulosa; paraphyses praesentes — Coleroa Rabh.
b) Ascomata nuda; paraphyses nullae — Aphysa Th. et Syd.

B. Ascomata discis ascigeris plurimis praedita; scutellum contextu distincte radiante praeditum; mycelium nullum — Munkielleae Th. et Syd.

1. Sporidia hyalina unilocularia — Coscinopeltis Speg.
2. Sporidia hyalina bilocularia
α) loculi aequales — Isomunkia Th. et Syd.
β) loculo inferiore papilliformi — Munkiella Speg.
3. Sporidia phaeophragmia — Melanochlamys Speg.

Genera dubia:

I. Disci ascigeri annulati innati; sporidia brunnea unilocularia; paraphyses praesentes — Blasdalea Sacc. et Syd.

II. Disci ascigeri lineares irregulariter distributi; paraphyses praesentes

a) Fructificatio demum libera; sporidia bilocularia brunnea — Aulacostroma Syd.

b) Fructificatio diu cuticula tecta; sporidia bilocularia brunnea — Pseudolembosia Theiss.

Sect. 1. Hyalosporae

COSCINOPELTIS Speg. — Syll. XXII p. 515. — Theiss. et Syd., Ann. Mycol. XIII, 1915, p. 260; XV, 1917, p. 402. — Huc spectat etiam sec. Theiss. et Syd.: *Phyllachora tenuis* Speg. et *Ph. tenuissima* Sacc. et Syd., Syll. IX p. 1009, XIV p. 673. 4672

Sect. 2. Phaeosporae

ENTOPELTIS v. Höhnel, Fragm. z. Mykol. X, 1910, n. 489. — Theiss. et Syd., Ann. Mycol. XV, 1917, p. 401. — Ascomata subcuticularia, scutata, alata, contextu hyphenchymatico radiante tenui praedita, hyphis e margine prominentibus. Sporidia unilocularia brunnea; caeterum ut in *Vizella*. — Typ. gen. *Ent. interrupta* (Wint.) v. Höhn., l. c. 4673

Sect. 3. Hyalodidymae

LEPTOPELTIS v. Höhnel, Ber. deutsch. bot. Ges. XXXV, 1917, p. 358. — Subcuticularis. — Typus gen. *Lept. filicina* (Mont., ut Gloniella) v. Höhn. — In Pteride. 4674

MUNKIELLA Speg. — Syll. IX p. 1034, XVI p. 625, XXII p. 434.— Theiss. et Syd., Ann. Mycol. XIII, 1915, p. 262; XV, 1917, p. 402.

1. **Munkiella Shiraiana** Miyake et Hara, Stud. üb. die Pilze der Bambusse (jap.) in litt. VI, 1912. Status conidiophorus: *Melanconium Shiraianum* Syd. — Syll. XIV p. 1009. — Perithecis uniseriatis (st. conidioph. intermixtis), stromate immersis et cum eo continuis, globosis v. leniter depressis, 140-190 μ diam., ostiolis erumpentibus; ascis cylindricis, apice rotundatis deorsum leviter tenuatis, 85-95 × 18-24, octosporis; sporidiis distichis, raro monostichis, ellipsoideis v. ovoideis, saepe curvulis, bilocularibus, loculis valde inaequalibus, non constrictis, 25-35 × 8,5-12, hyalinis, prima aetate strato mucoso obductis; paraphysibus filiformibus, 5 μ cr., asco paullo longioribus. 4675

Hab. in culmis emortuis Phyllostachydis bambusoidis, Komaba Tokyo, Japonia. — Germinatio in stat. conid. et ascoph. observata.

ISOMUNKIA Theiss. et Syd., Ann. Mycol. XIII, 1915, p. 261; XV, 1917, p. 402. — A gen. *Coscinopeltis* differt sporidiis hyalodidymis. — Typ. gen. *Is. pulvinula* (Pat., ut Dothidella) Th. et Syd., l. c. 4676

Sect. 4. Phaeodidymae

STIGMATEA Fr. — Syll. I p. 541, IX p. 660, XIV p. 534, XVI p. 478, XVII p. 649, XXII p. 148.

1. **Stigmatea Pelvetiae** Sutherland, New Phytologist, XIV (1915), nn. 2-3, p. 37 fig. II, 1-6. — Peritheciis subconcentrice in maculis nigricantibus dispositis, immersis, prominentiis hemisphaericis efformantibus ostiolo tantum punctiformi erumpentibus, 160-200 μ cr.; contextu apicem versus tantum evoluto; ascis cylindraceis, longis, apice incrassatis, 100-120 × 12-14, 8-sporis; paraphysibus praesentibus, simplicibus v. ramosis, septatis; sporis ovoideis, 22-25 × 9-12, hyalinis, uniseptatis, distincte constrictis; pycnidiis minoribus, pyriformibus, tunica crassa nigra praeditis, 70 × 85 μ cr., primum immersis dein superficialibus; sporulis 3 × 1,5 (? *Phyllosticta*). 4677

Hab. parasitice in thallo Pelvetiae (ex Algis), ad litora Scotiae.

2. **Stigmatea bullata** Syd., Leafl. Philipp. Bot., IV, 1911, Art. 62, p. 1154. — Maculis orbicularibus in hypophyllo ochraceis obscurius marginatis, 2-4 mm. diam., leniter bullatis; peritheciis epiphyllis, 4678

totam maculam occupantibus, densissime aggregatis, globosis, atris, 70-100 μ diam., pariete 18-20 μ crasso, apice tantum prominulis, pertusis; ascis clavatis, apice rotundatis, breviter pedicellatis, 45-70 μ longis, 14-18 μ latis, octosporis; sporidiis distichis utrinque obtusis, medio 1-septatis, non constrictis, hyalinis, 18-22 μ longis, 5-7 μ latis; paraphysibus ascos aequantibus filiformibus 1 μ cr.

Hab. in foliis vivis Schefflerae mindanaensis (Araliaceae), Todaya, Ms. Apo, Distr. Davao, ins. Mindanao in Philipp. (Elmer).

3. **Stigmatea Cephalariae** Ranojevic, Ann. Mycol. XII, 1914, p. 396. — 4679
Maculis primum brunneo-violaceis, dein albido-griseis plerumque violaceo-marginatis, rotundatis, usque 2 mm. latis, saepe confluentibus; peritheciis epiphyllis, gregariis, nigris, subepidermicis, ostiolo minuto perforantibus, globosis, elongatis, contextu cellulis brunneis usque ad 142 μ latis efformato; ascis cylindraceis, supra rotundatis, rectis, curvatis, 50-62 × 9-13; sporidiis infra subdistichis supra monostichis, elongato-clavatis, bilocularibus, loculo inferiori minori, septo saepe constrictis, 11-15 × 4-7,5, pallide brunneo-fuligineis, paraphysibus filiformibus, septatis, supra 1-2 dichotome ramosis, apice incrassatis, ascis aequilongis v. parum superantibus.

Hab. in foliis caulibusque vivis Cephalariae transylvanicae (Dipsacaceae), Weinbergen Gorica prope Nisc, Serbia.

4. **Stigmatea philippinensis** H. S. Yates, Philipp. Journ. Sc. XII (1917) 4680
p. 376. — Maculis albo-griseis, orbicularibus vel elongatis, 5 mm. diam. vel usque ad 3 cm. longis et 1 cm. latis; peritheciis immersis, ostiolis numerosis, epiphyllis, hemisphaericis, 75-100 μ diam.; ostiolis orbicularibus; ascis elongatis, 26-30 × 10, octosporis; sporidiis oblongo-ellipsoideis, medio 1-septatis, levibus, 12-13 × 3-4.

Hab. in foliis Homalii (Flacourtiaceae), Basiad, Tayabos, Luzon, Ins. Philipp.

5. **Stigmatea cinereo-maculans** Rehm, Ascomyc. Philipp. II, in Phi- 4681
lipp. Journ. of Sci. VIII (1913) p. 257. — Peritheciis maculis epiphyllis dilute cinereis, rarissime atro-marginatis, orbicularibus, 0,5-1 mm. latis, mox in latas plagas confluentibus innatis, primitus singulis, lenticularibus, hemiglobose prominentibus, atris, poro pertusis, glabris, 200 μ latis, membranaceis, parenchymatice fuscidule contextis; ascis cylindraceis, 25 × 3-3,5, plerumque tetrasporis paraphysibus haud conspicuis; sporidiis monostichis, ellipsoideis, utrinque rotundatis, medio septatis, non constrictis, utraque parte 2-guttulata, hyalinis, 6-7 × 2.

Hab. in vaginis foliorum P a n d a n i (Pandanaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (C. F. Baker). — *St. Pandani* Pat. sporidiis et ascis omnino diversa.

6. **Stigmatea Pirolae** (Fr.) Schröt., Die Pilze Schles., II p. 332 (1908) 4682
Lind. Dan. Fung. p. 201 t. IV p. 49-50. — Ita vocanda *Sphaeria* (Depazea) *Pirolae* Fr. — Sacc. Syll. III p. 64, seu *Sphaerella chimophilina* Peck. — Syll. XI p. 297. — Perithecia 120-150 μ diam.; asci clavati apice rotundati, subsessiles, fasciculati, aparaphysati, 40-56 × 8; sporidia octona, inaequaliter 1-septata, hyalina, 12-14 × 4.

Hab. in foliis P i r o l a e (Pirolaceae), in Germania, Dania, Amer. bor. — Ob sporidia hyalodidyma potius *Isomunkia.*

7. **Stigmatea moravica** Petrak, Flor. Boh. et Mor. exs. II Ser. 1. Pilze 4683
n. 172 (sub *Stigmatea seriata* Wint.); Ann. Mycol. XII, 1914, p. 473.— Peritheciis gregariis, minutissimis, epidermide tectis, ambitu circularibus v. ovatis, 70-100 μ diam., poro minutissimo pertusis, contextu membranaceo pseudoparenchymatico, brunneo; ascis fusoideis, utrinque paullatim angustatis medio latissimis sessilibus, 50-60 × 4-7, aparaphysatis; sporidiis distichis v. submonostichis, rectis v. plus minusve curvulis, anguste fusoideis utrinque attenuatis, medio uniseptatis, ad septum non constrictis, eguttulatis, 10-18 × 1,5-2,5.

Hab. in ramulis emortuis R o s a e c a n i n a e (Rosaceae), prope Hraburka, Mähr. Weisskirchen, Moraviae or.

8. **Stigmatea Tonduzi** Spegaz., Fungi Costaric. nonn., in Bol. Ac. Nac. 4684
Cienc. Cordoba, t. 23., 1919, Extr. p. 194. — Maculae epiphyllae suborbiculares, subdeterminatae, rufescentes; perithecia epiphylla centro macularum laxe gregaria, innato-erumpentia, pusilla, 75-100 μ diam., fusca sublenticularia umbonatulo-ostiolata, glabra; asci subclavulati, antice obtusissime rotundati, postice sensim attenuati, pedicello brevi crassiusculo fulti, aparaphysati, octospori, 45-55 × 8-10; sporae angustae subcylindraceae, utrinque obtusae medio 1-septato-constrictulae, laeves, hyalinae, 14-15 × 3,5-4.

Hab. in foliis vivis R u b i (u r t i c i f o l i i) (Rosaceae), prope Carthago Costarica, America trop.

9. **Stigmatea Guettardae** L. R. Tehon, Bot. Gazette 67., 1919, p. 508.— 4685
Maculis latis 0,5-3 cm. diam., irregularibus, pallide brunneis v. juventute rubris vetustate cinereis v. albis, quandoque definitis et brunneo marginatis; peritheciis epiphyllis, gregariis, centro macularum dispositis, parvis, nigris, 60-80 μ diam., ostiolo erumpenti 6-10 μ lato praeditis; ascis oblique oblongis, brevibus et abrupte

stipitatis, supra obtusis, octosporis, 25-40 × 8-10; sporidiis elongato-ellipsoideis, bilocularibus, constrictulis, loculis subaequalibus, hyalinis, 11-13 × 2-3; paraphysibus longis filiformibus septatis, e hyalinis flavescentibus.

Hab. in foliis Guettardae ovalifoliae (Rubiaceae), Maricao, Barros, M. Alegrillo, Indiera Fria, G. scabrae, Tanama Riv., Porto Rico, America.

10. **Stigmatea Cestri** Patouill., Bull. Soc. Mycol. de Fr., 1912, p. 141.— 4686
Maculis epiphyllis, orbicularibus, nigris, 4-8 mm. diam., irregulariter sparsis; perithecis centro gregariis, globosis, nitentibus, semiimmersis, coriaceis, 90-100 μ latis, apice poro pertusis, albo-nucleatis; ascis claviformibus, obtusis, circ. 100 × 20, octosporis, aparaphysatis; sporidiis biseriatis, hyalinis, continuis, ellipsoideis, intus granulosis, 21 × 9.

Hab. in foliis vivis Cestri sp. (Solanaceae), propè San José Costa Rica, America Centr. (Tonduz).

COLEROA Fr. ut sub-gen. — Syll. XXII p. 153.

1. **Coleroa Aliculariae** Gonz. Frag., Hongos sobre Muscineas, Bol. Soc. 4687
Espan. Hist. Nat. t. XVI, 1916, p. 368. — Peritheciis epiphyllis, plerumque 1-2 superficialibus, globulosis, usque 125 μ diam., contextu pseudoparenchymatico, membranaceo, fuligineo, setulis laxe vestitis, setis fuscis usque 38 × 3, continuis v. 1-septatis, attenuatis, rectis v. leniter flexuosis, raro curvulis; ascis obpiriformibus usque 45 × 14, aparaphysatis, subsessilibus, parietibus crassiusculis, apice rotundatis; sporidiis irregulariter distichis, ovoideo-oblongis, subhyalinis, 12-15 × 6-7, ad medium uniseptatis, non constrictis, loculis 1-2 crasse guttulatis.

Hab. in foliis vivis Aliculariae scalaris (Bryophytae), in montibus Guadarramae loco dicto « La Cebollera », Hispania (Beltran). — *Coleroae bryophilae* (Fuck.) proxima.

2. **Coleroa Bubaki** Gonz. Frag., Hongos sobre Muscineas, Bol. Soc. 4688
Espan. de Hist. nat. t. XVI, 1916, p. 367. — Peritheciis 1-5-epiphyllis, superficialibus, globuloso-depressis, 75-175 μ diam., contextu pseudoparenchymatico, membranaceo, fusco, poro minuto pertusis, setulis numerosis vestitis, setis flexuosis, obtusiusculis, septatis, plerumque 25-30 μ long. basi 3-3,5 μ cr.; ascis ellipsoideo-oblongis 36-40 × 14-15,5, octosporis, brevissime pedicellatis, apice rotundato-incrassatis, aparaphysatis; sporidiis tristichis v. conglobatis, ovoideo-oblongis, subhyalinis, primum continuis, dein 1-septatis, non

constrictis, loculo uno latiore altero attenuato, 1-guttulatis v. granulosis, extremis utrinque rotundatis, 12-15 × 5-5,5.

Hab. in foliis vivis v. languidis Marsupellae emarginatae (Bryophytae), prope Santiago, Hispania (A. Casares). — Affinis *Coleroae bryophilae* (Fuck.), sed diversa.

3. **Coleroa Casaresi** Bub. et Frag. in Bub., Hedw. LVII p. 3 (1915). 4689
Peritheciis epiphyllis, 1-3, superficialibus, membranaceis, globosis, basi applanatis, 75-100 μ diam., nigris, apice poro rotundo apertis, contextu parenchymatico atro-brunneo, extus setis paucis sparsis, nunc creberrimis, atro-brunneis 20-40 × 3, rectis v. curvatis, sursum parum attenuatis, continuis, v. 1-septatis; ascis ovoideo-oblongis, 20-28 × 7-9, apice rotundatis et incrassatis, breve pedicellatis, 8-sporis, aparaphysatis; sporidiis 3-4-stichis, oblongis, 7-9 × 3-3,5 utrinque rotundato-attenuatis, 1-septatis, loculo sup. interdum latiore.

Hab. in foliis Scapaniae nemorosae (Bryophytae), Castro-Loureiro, Pontevedra, Hispania (Casares). — A *Col. turfosorum* (Mont.) Bubák sphagnicola, distinguenda. — Var. **Frullaniae** Gonz. Fragoso, Mem. R. Soc. Espan. Hist. Nat. t. 11., 1919, 3., p. 108, fig. 1. — Peritheciis subsuperficialibus basi immersis, atris, globosis, usque 120 μ diam., contextu pseudoparenchymatico, membranaceo, poro regulariter pertusis, setis rectis vel curvulis, continuis, vel 1-septatis, usque 28 μ long., circumdatis; ascis usque 28 × 9, ovoideo-oblongis, subsessilibus; sporidiis irregulariter distichis vel tristichis, prope medium 1-septatis, utrinque attenuato-rotundatis, loculis guttulis crassis minutisque praeditis.

Hab. in foliis vivis Frullaniae Tamarisci (Bryophytae) cui noxia, ? Pontevedra, Hispania (Dr. A. Casares). — Var. **Plagiochilae** Gonz. Frag., l. c. — Peritheciis, 1-5, epi-vel hypophyllis, superficialibus, globosis vel globoso-applanatis, 60-95 diam., contextu pseudoparenchymatico, membranaceo, atro-brunneo, poro rotundo apertis, setis prope apicem dispersis vel circumdantibus, atro-brunneis, rectis vel vix curvatis, attenuatis, usque 45 × 3,5-4, continuis, rarissimis 1-septatis; ascis ovoideo-oblongis, 20-25 × 7-10, rarius usque 28 × 10, brevi pedicellatis, octosporis, aparaphysatis; sporidiis distichis vel conglobatis, ellipsoideo-oblongis, 10-11,5 × 3,2-3,5, utrinque rotundatis, 1-septatis, rarius loculis 1-guttulatis.

Hab. in foliis Plagiochilae asplenioidis (Bryophytae), in silvis Saleur, Germania (C. Keck).

4. **Coleroa inconspicua** Bubàk, III Beitr. Pilz. Montenegro, in Botanikai Közlemények, 1915, p. (54). — Peritheciis in rimis fissurisque caulium et ramorum, superficialibus, facile secedentibus, basi hyphis simplicibus vel funiculato-contextis brunneis vel hyalinis, torulosis, repentibus instructis, globosis, basi applanatis, supra subconicis, ostiolatis, 40-80 μ in diam., castaneo-brunneis, contextu pseudoparenchymatico, tenui, melleo, setis rigidis, rectis, usque 50 μ longis, 4 μ latis, sursum sensim attenuatis, apice acutatis vel rotundatis, brunneis, continuis vel 1-2 septatis, paucis vel pluribus supra ornatis; ascis oblongis vel oblongo-cylindricis, 38-60 × 9-13, apice rotundatis, basi breve pedicellatis, paraphysibus ephemeris, tenuibus obvallatis, octosporis; sporidiis oblique distichis, oblongo-clavatis, 15-19 × 5, rectis vel curvatis, utrinque rotundatis, medio uniseptatis, non constrictis, loculo superiore latiore, olivaceo-chlorinis. 4690

Hab. in caulibus ramisque Genistae sericeae (Leguminosae), ad Njegusi, Montenegro.

APHYSA Theiss. et Sydow, Ann. Mycol. 15., 1917, p. 134, et p. 402.— A *Stigmatea* differt scutellis levibus margine tantum radiantibus; paraphysibus nullis. — Typ. gen. *Aph. Rhynchosiae* (K. et Cke. in Stigmatea) Th. et Syd. (= Parodiella Schimperi P. Henn). 4691

Sect. 5. Hyalophragmiae

STIGMATODOTHIS Syd., Philipp. Journ. Sc., C. Bot., IX, n. 2 (1914), p. 173. — Stromata subcuticularia, exigua, 1-loculigera, carbonacea, superne pluristratose et irregulariter radiatim contexta, haud ostiolata sed superne tandem poro rotundo aperta, strato basali tenuissimo, hypostromate parco per epidermidem profunde in contextu matricis penetrante massam compactam haud formante. Asci ovato-oblongi, 8-spori. Paraphyses haud typicae, cellulosae submucosae. Sporidia hyalina transverse pluriseptata.

1. **Stigmatodothis palawanensis** Syd., l. c., fig. 5. — Stromatibus amphigenis sparse vel laxe gregariis haud maculicolis rotundatis, depresse hemisphaericis, 130-170 μ diam., atris, pro ratione facile secedentibus, sed inter cuticulam et epidermidem ortis, tota basi in pariete exteriore epidermidis sessilibus, primitus cuticula dein rupta et plus minus evanescente obtectis, carbonaceis, superne pluristratose irregulariterque radiatim contextis, haud ostiolatis sed tandem poro rotundo apertis, hypostromate inter epidermidis cellulas in 4692

contextu matricis profunde penetrante, strato basali tenuissimo plano brunneolo; ascis ovato-oblongis, sessilibus, tenuiter tunicatis, apice rotundatis, 26-30 × 14-16, octosporis; paraphysibus haud typicis cellulosis, submucosis, sporidiis tristichis, clavulatis, superne rotundatis, deorsum angustioribus, transverse 3-septatis, non constrictis, rectis vel lenissime inaequilateris, hyalinis, 14-17 × 3,5-4.

Hab. in foliis vivis Dendrobii, Palawan, Taytay, Ins. Philipp. (MERRILL).

Sect. 6. Phaeophragmiae

MELANOCHLAMYS Syd. ap. Fuhrmann et Mayor, Voy. Expl. Scient. Colombie, in Mém. Soc. neuchât. Sc. Nat. V p. 438 (1913), Ann. Mycol. XIII, 1915, p. 264. — Stroma membranaceum, dimidiato-scutatum, microthyriaceum, atrum, per cuticulam erumpens et subsuperficiale, ex hyphis radiantibus contextum, ambitu fimbriatum. Perithecia hypostromatica, globuloso-lenticularia, ostiolata, contextu minute fibroso. Asci clavati, octospori, paraphysati. Sporidia transverse pluriseptata, colorata. — Affine videtur *Gilletiellae* Sacc. et Syd. (*Heterochlamys* Pat.) a quo praecipue differt sporidiis coloratis

1. **Melanochlamys leucoptera** Syd., loc. cit., cum ic. — Stromatibus hy- 4693
pophyllis, sparsis, irregularibus, rotundatis vel oblongis, 0,5-2 mm. longis vel latis, sub cuticula ortis, mox erumpentibus et partim cuticulae laciniis tectis, subsuperficialibus, atris, opacis, membranaceis, ex hyphis radiantibus longis, 2-2,5 μ latis, flexuosis vel maeandrice curvatis, septatis, fuscis contextis, ad ambitum multo tenuioribus albo-membranaceis et fimbriatis; perithecis 2-10 in quoque stromate, hypostromaticis, convexis, globuloso-lenticularibus, 80-130 μ diam., contextu dilute brunneo minute fibroso; ascis clavatis, brevissime stipitatis, apice obtusis, 38-46 × 9-10, octosporis: filiformiter paraphysatis; sporidiis distichis, oblongis, utrinque obtusis, 3-septatis, ad septa leniter constrictis, cellula secunda superiore paullo latiore, ex hyalino mox obscure olivaceo-brunneis, 13-16 × 3,5-4,5.

Hab. in foliis languidis Bambusaceae cuiusdam, in dep. Magdalena prope El Banco, Columbia.

Sect. 7. Hyalodictyae

*) **VIZELLA** (Sacc.) Emend. Theissen in Broteria XII, 1914, p. 13.— Syll. II p. 662, IX p. 1054, XVII p. 861, XXII p. 515. — Cnfr. etiam Theiss. e Syd., Ann. Mycol. XV, 1917, p. 401.

1. **Vizella Passiflorae** Rehm, Ascom. Philipp. IV, Leaflets of Philipp. Botany, VI (1913) p. 1945. — Peritheciis sessilibus, confertis, interdum fere confluentibus, dimidiato-orbicularibus, convexis, poro perspicuo pertusis, nigris, 150-200 μ latis, glabris, contextu membranaceo fusco, ad marginem hyphis brevibus radiantibus obsessis; ascis evanidis; sporidiis oblongis, continuis, utrinque rotundatis, fuscis, 20-25 × 10. 4694

   Hab. in caulibus emortuis Passiflorae quadrangularis, Luzon, Prov. Laguna, Los Baños, ins. Philipp. (C. F. Baker).

2. **Vizella Guilielmi** Rehm in Rick, Ann. Mycol. IX, 1911, p. 181.— Nomen nudum. — *Hab.* in Sorocea ilicifolia, America austr. — (Etiam sub *Linhartia Soroceae* Rehm, in l. c.). 4695

Stigmateacearum gen. dubia:

AULACOSTROMA Syd., Philipp. Journ. of Sc. Sect. C. Bot. v. IX, 1914, p. 176. — Theissen et Sydow, Ann. Mycolog. XIII, 1915, p. 256; XV, 1917, p. 403. — Stromata subcuticularia, radiato-contexta, demum cuticulâ ruptâ libera superficialia, hypostromate extenso obscuro in parte exteriore epidermidis, peripherice in hyphas radiantes ramosas dissoluta. Loculi lineares, inordinate in stromate discurrentes. Asci paraphysati octospori. Sporae phaeodidymae.

1. **Aulacostroma palawanense** Syd., l. c. fig. 7; Theiss. et Syd. l. c. 1915, tab. VI fig. 11-13. — Stromata epiphylla, plagulas primitus minutas orbiculares, mox confluentes maiores et irregulares formantia, subinde folia fere tota obtegentia, plana, crustacea, atra, granulosa, peripherice in hyphas radiantes dissoluta; hyphis longiusculis, alternatim ramosis, fuscis, rectis vel irregulariter flexuosis, remote septatis, 4-5,5 μ crassis, in axillis bulbillulas irregulares vel oblongas concolores vel parum obscuriores gerentibus; peritheciis plus minus numerosis in quoque stromate, laxe vel densiuscule dispositis, a reliquiis epidermidis ruptae obtectis, linea- 4696

*) Sec. Theiss. et Sydow huic gen. spectant sporidia muralia hyalina nec continua obscura.

ribus, atris, 0,3-1,2 mm. longis, 150-200 μ latis, rectis vel varie curvatis, 80-90 μ altis, aut geniculatis, rima longitudinali apertis, contextu atro-fusco, marginem versus fusco, ex hyphis rectis vel subrectis remote septatis (articulis 15-25 μ longis 2,5-3,5 μ crassis) ad apicem dichotomo-partitis composito, nucleo hyalino-viridulo mucoso; ascis subglobosis, ovatis vel ovato-oblongis, sessilibus, apice rotundatis, 48-55 × 25-35, octosporis; paraphysibus superne subclavatis, hyalino-viridulis 1,5-2 μ crassis, mucosis; sporidiis distichis vel tristichis aut conglobatis, ellipsoideis vel oblongo-ellipsoideis, utrinque late rotundatis, medio 1-septatis, constrictis, ex hyalino fuscis, levibus, 20-25 × 10-12; pycnidiosporis in perithecciis similibus evolutis, sessilibus, cylindraceis, utrinque obtusis, continuis, hyalinis, 8-12 × 2-2,5.

Hab. in foliis Pandani Merrilli (Pandanaceae), Palawan, Taytay, Ins. Philippin. (Merrill).

PSEUDOLEMBOSIA Theiss., Ann. Mycol., XI, 1913, p. 432.— Theiss. et Syd., Ann. Mycol. XIII, 1915, p. 257; XV, 1917, p. 403. — Stromata subcuticularia, tecta, crustacea, absque hyphis liberis, radiato-contexta, loculis discretis linearibus. Asci paraphysati octospori. Sporae phaeodidymae. — Pycnidia lenticularia, subcuticularia, irregulariter rupta, conidiis brunneis cruciatim septatis. — Typ. gen. *Ps. geographica* (Mass. ut Lembosia) Th., *Ps. lenticularis* (Wint. ut Lembosia) Th. 4697

Subfam. 2. **Hemihysterieae** Speg. (Polystomelleae Th. et Syd.)

Conspectus Gen. Polystomellacearum sec. Theissen et Sydow

Fam. 2. **Polystomellaceæ** Theiss. et Syd.

Ann. Myc. 13, 1915, p. 158; Theiss. et Syd., Ann. Mycol. 13., 1915, p. 195; 15., 1917, p. 404.

A. Ascomata superficialiter disposita, hypostromate intramatricali; disci ascigeri lineares — Parmulineae Theiss. et Syd.

I. Disci ascigeri radiatim dispositi

a) Ascomata centro inserta; paraphyses praesentes

1. Ascomata glabra, disci ascigeri stellatim dispositi; sporidia phaeodidyma — Parmulina Th. et Syd.

2. Ascomata glabra, disci ascigeri flabellati; sporidia phaeodidyma — Rhipidocarpum Th. et Syd.
3. Ascomata setulosa; disci ascigeri irregulariter stellati; sporidia phaeodidyma — Chaetaspis Syd.

b) Ascomata varie inserta

1. Ascomata pili conidiferi destituta; sporidia phaeodidyma; paraphyses praesentes — Schneepia Speg. = Parmularia Lév. quia immaturum
2. Ascomata pili conidiferi praedita; sporidia hyalodidyma; paraphyses nullae — Parmulariella P. Henn.

II. Disci ascigeri annulatim dispositi

a) Ascomata centro inserta

1. Sporidia continua brunnea; asci 16-spori — Cyclostomella Pat.
2. Sporidia hyalodidyma; asci 8-spori; paraphyses praesentes — Cycloschizon P. Henn.
3. Sporidia phaeodidyma

α) Disci ascigeri margine non radiantes; sporidia loculis subaequalibus praedita; paraphyses praesentes — Dielsiella P. Henn. = Maurodothis Sacc. et Syd.

β) Disci ascigeri margine non radiantes; sporidia loculis inaequalibus praedita; paraphyses nullae — Polycyclus v. H.

γ) Disci ascigeri margine radiantes; paraphyses nullae — Inocyclus Th. et Syd.

b) Ascomata varie inserta

1. Sporidia hyalodidyma; paraphyses nullae — Polycyclina Th. et Syd.
2. Sporidia phaeodidyma; paraphyses praesentes — Cocconia Sacc.
3. Sporidia hyalodictya; paraphyses praesentes — Mendogia Rac. = Uleopeltis P. Henn.

III. Disci ascigeri irregulariter dispositi

a) Ascomata centro inserta; sporidia phaeodidyma

1. Paraphyses praesentes — Monorhiza Th. et Syd.
2. Paraphyses absentes — Monorhizina Th. et Syd.

b) Ascomata varie inserta; sporae didymae

1. Hypostroma fasciculatum nullum

α) Sporidia hyalina

* Paraphyses nullae; asci rosulati — LAUTERBACHIELLA P. Henn.

** Paraphyses praesentes; asci conoideo-dispositi — CYCLOTHECA Th.

β) Sporidia brunnea

* Paraphyses nullae — HYSTEROSTOMELLA Speg.

** Paraphyses praesentes — HYSTEROSTOMINA Th. et Syd.

2. Hypostroma subcuticulare fasciculatum. Mycelium liberum praesens; sporidia phaeodidyma; paraphyses praesentes — LEMBOSIODOTHIS v. H.

B. Ascomata superficialiter disposita, hypostromate intramatricali; disci ascigeri rotundati — POLYSTOMELLEAE Theiss. et Syd.

I. Ascomata centro inserta

a) Fasciculi hypostromatici subcuticulares

1. Mycelium superficiale praesens setulis erectis praeditum; paraphyses praesentes — DOTHIDASTEROSTOMELLA v. H.

2. Mycelium superficiale praesens, hyphis longis erecto-adscendentibus terminatum; paraphyses nullae — SCOLIONEMA Th. et Syd.

3. Mycelium nullum — DOTHIDASTEROMA v. H.

b) Fasciculi hypostromatici nulli; ascomata centro radicata

1. Ascomata singula, setuligera — ASTERODOTHIS Th.

2. Ascomata aggregata, glabra — POLYRHIZON Th. et Syd.

II. Ascomata varie inserta

a) Mycelium distinctum praesens; sporae didymae

1. Sporidia hyalodidyma; paraphyses praesentes; mycelium hyphopodiatum — ARMATELLA Th. et Syd.

2. Sporidia phaeodidyma

α) Paraphyses nullae; mycelium ramosum — PLACOASTERELLA Sacc.

β) Paraphyses praesentes; hyphae simplices circa ascomata radiantes — HYSTEROSTOMA Th.

b) Mycelium distinctum nullum

1. Disci ascigeri sub scutello commune dispositi, plechtenchyma hyalino separati

α) Paraphyses nullae — RHAGADOLOBIUM P. Henn. et Lind.

β) Paraphyses praesentes — POLYSTOMELLA Speg.

2. Disci ascigeri scutello distincto separati

α) Sporidia continua hyalina ; paraphys. praes. — Ellisiodothis Th.

β) Sporidia hyalodidyma

* Paraphyses nullae — Leptodothis Th. et Syd.

** Paraphyses praesentes — Sympeltis Syd.

γ) Sporidia phaeodidyma

* Hypothecium hyalinum; disci ascigeri irregulariter distributi

. Paraphyses praesentes — Palawania Syd.

.. Paraphyses nullae — Melanoplaca Syd.

** Hypothecium carbonaceum ; disci ascigeri circa partem centralem sterilem distributi; paraphyses praesentes — Marchalia Sacc.

δ) Sporidia hyalophragmia (4-loc.) ; paraph. praes. — Gilletiella Sacc. et Syd. = Heterochlamis Pat. nec Turcz.

ε) Sporidia phaeophragmia (4-loc.); paraphyses nullae — Actinodothis Syd.

3. Disci ascigeri concentrice dispositi, scutello distincto separati — Pleiostomella Syd.

Sect. 1. Hyalosporae

ELLISIODOTHIS Theiss., Ann. Mycol. XII, 1914, p. 73; Theiss. et Syd. Ann. Mycol. XIII, 1915, p. 246; XV, 1917, p. 412. — Ascomata mycelio libero destituta superficialia, ex hypostromate epidermali oriunda punctis pluribus affixa, supra radiato contexta, carbonacea. Disci ascigeri rotundati. Hypothecium incolore molliusculum. Asci paraphysati octospori. Sporidia hyalina, unilocularia. — Typus gen. *Ellisidothis inquinans* (E. et Ev. in Asterina) Theiss., l. c. p. 73 tab. VI fig. 5, *Asterula inquinans* (E. et Ev.) Theiss., Ann. Mycol. 1912 p. 193.

1. **Ellisiodothis Rhemiana** (Th. et Syd.) Theiss. et Syd., Ann. Mycol. 4698
XIII, 1915, p. 248, XV, 1917, p. 412, *Phyllachora Rhemiana* Th. et Syd., l. c. XII, 1914, p. 184. — Syn. *Phyll. ? Dioscoreae* Rhem, Phill. Journ. Sc. 1913, p. 183, non *Ph. Diosc.* (Schw.) Sacc. — Ascomata nigro-opaca e rotundata ellipsoidea magnitudine variabilia 180 μ diam. v. 250-350 × 180-200, ad caules late effusa ; disci ascigeri solitari v. confluentes. ? Asci (sec. Rhem) fusoidei, 50-60 × 15, octospori. Sporidia disticha, clavata hyalina unilocularia, 12-15 × 5-6. Paraphyses filiformes.

Hab. ad caules Dioscoreae sp. (Dioscoreaceae), Luzon, ins. Philippin.

2. **Ellisiodothis microdisca** Syd., Ann. Mycol. XV, 1917, p. 221. — Stro- 4699
mata dense disposita, plerumque seriatim ordinata, superficialia, omnino orbicularia, 130-180 μ diam., discoidea, saepe confluentia, atra, opaca, subcarbonacea, radiatim contexta, ex hyphis 2-3 μ latis crebre septatis rectis vel subrectis composita; hypostromate epidermali; hypothecio hyalino fibroso; loculi discreti; strato obtegente tandem poro rotundo disrumpente; asci sessiles, clavati vel saccati, apice rotundati, 34-38 × 12-15, tenuiter paraphysati, octospori; sporae ovato-oblongae, continuae, hyalinae, utrinque obtusae, 10-12 × 4-5.

Hab. in foliis caulibusque Freycinetiae sp. (Pandanaceae), Biliran, Ins. Philipp. (R. C. Mc. Gregor).

3. **Ellisiodothis Pandani** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 565.— 4700
Stromatibus ascigeris superficialibus, tota longitudine matrici adnatis, gregatim dispositis, subinde confluentibus, ambitu plerumque rotundatis, 0,3-1 mm. diam., atris, opacis, subcarbonaceis, radiatim contextis ex hyphis 3-5 μ latis crebre septatis (articulis 6-10 μ longis) rectis vel subrectis compositis; hypostromate epidermali, per stomata erumpente; poro rotundo disrumpente; ascis ellipsoideo-oblongis usque clavatis, apice rotundatis et incrassatis, 50-70 × 20-26, octosporis, copiose paraphysatis; sporidiis plerumque oblique monostichis usque distichis, ellipsoideis vel oblongo-ellipsoideis, utrinque obtusis, continuis, hyalinis, 17-20 × 8-10,5.

Hab. in foliis Pandani luzonensis (Pandanaceae), Angat prov. Bulacan, Ins. Philippin. (M. Ramos).

Sect. 2. Hyalodidymae

POLYSTOMELLA Speg. — Syll. IX p. 1063, XVI p. 639, XVII p. 865, XXII p. 522. — Cnfr. Theissen et Syd., Ann. Mycol. XIII, 1915, p. 242.

1. **Polystomella repanda** Spegaz., Rel. Mycol. trop. in Bol. Ac. Nac. Cienc. 4701
Cordoba, t. 23., 1919, p. 144. — Stromata epiphylla majuscula 5-10 mm. diam., atra crustacea tenuia, difformia, ambitu irregulariter lobulato-repanda, hinc inde conferte v. laxe minuteque papillulato-ostiolata, contextu prosenchymatico-radiante fere opaco parum distincto: loculi sparsi parvi 150-200 μ subdiscoidei vix prominuli superne minute stellato-dehiscentes; asci obovati majusculi, 80 × 50,

tunica crassa leniter violascente vestiti, aparaphysati, 6 8 spori; sporae ellipticae v. subovatae utrinque obtusiusculae, ad medium v. parum supra 1-septatae, non v. vix constrictae, loculis parum inaequalibus, supero saepius nonnihil breviore, primo hyalinae dein fuligineae, 35-40 × 16-18.

Hab. ad folia viva Ingae sp. (Leguminosae), in silvis prope Apiahy Brasilia (J. PUIGGARI).

2. **Polystomella Kawagoii** Hara, Botan. Mag. Tokyo XXIX, n. 338, p. 51 (1915). — Stromatibus superficialibus, opace nigris, asperulis, parum gibbulosis, rotundatis v. irregulariter elongatis, 1 5 mm. long. 0,9-4 mm. latis 200-400 μ altis, coriaceo-carbonaceis; contextu stromatico brunneo, parenchymatico, cellulis polygoniis, 4-10 μ latis, v. rotundato-ovoideis, 70-120 × 50-80, densis, loculis verticaliter stratosis; paraphysibus nullis; ascis cylindraceis v. elongato-ovoideis infra plerumque parum ventricosis, breviter pedicellatis, distichis v. tristichis, 50-60 × 13-16, apice rotundatis tunica ibique 2-3 μ crassa; sporidiis hyalinis, ovoideis v. ellipsoideis, utrinque rotundatis, uniseptatis, tunica tenui aequali praeditis, 16-20 × 3-4; loculo superiori quandoque parum crassiore sed breviore. 4702

Hab. in utraque pagina foliorum Pruni macrophyllae et Pr. spinulosae (Rosaceae), Kagoshima, Japonia (KAWAGOI, UYEHARA, SASAKI).

3. **Polystomella Rubiacearum** G. Arnaud, Ann. École Nat. Agricult. Montpellier, t. 16., 1918, p. 142, tab. XXIII. — *Pol. pulcherrima* Speg. 1889 p. p. 4703

Hab. in foliis Rubiaceae cujusdam, Apiahy, Sao Paulo, Brasilia, America austr. (PUIGGARI). — Typus *Pol. pulcherrimae* Speg. est fungus in foliis Solani boerhavifolii vigens.

POLYCYCLINA Theiss. et Syd., Ann. Mycol. XIII, 1915, p. 212; XV, 1917, p. 408. — Ascomata tenuiter crustacea, ex hypostromate subepidermico brunneo pluribus in locis erumpenti orientia, radiatim contexta; disci ascigeri pluries concentrice annulatim dispositi. Asci octospori aparaphysati. Sporidia bilocularia hyalina. — Typ. gen. *Pol. rhytismoides* (Speg. ut Hysterostomella (?)) Th. et Syd. 4704

CYCLOTHECA Theiss., Ann. Mycol. XII, 1914, p. 70; XIII, 1915, p. 221; XV, 1917, p. 409. — Ascomata superficialia, radiato-contexta (saltem margine), irregulariter extensa, ex hypostromate incolore informi oriunda; disci ascigeri lineares numerosi, irregulariter distri- 4705

buti. Asci octospori, paraphysati, colliculo cuneiformi, plechtenchymatico ex hypothecio formato impositi. Sporidia bilocularia hyalina. — Typ. gen. *Cycl. Miconiae* (Syd. ut Polystomella) Theiss. l. c.

ARMATELLA Theiss. et Syd., Ann. Mycol. XIII, 1915, p. 235, XV, 1917, 4706
p. 410. — Mycelium superficiale, ramosum, septatum, hyphopodiatum. Ascomata superficialia ex hypostromate epidermali extense orinnda, radiato contexta, punctis pluribus affixa, discum ascigerum unicum (an semper?) praedita. Asci paraphysati octospori. Sporidia hyalina bilocularia. — Typus gen. *A. Litseae* (P. Henn. ut Dimerosporium) Theiss.

LEPTODOTHIS Theiss. et Syd., Ann. Mycol. XII, 1914, p. 268, XIII, 4707
1915, p. 248, XV, 1917 p. 412. — Ascomata tenuiter crustacea, contextu radiato, superficialia. Hypostroma ex hyphis copiosis intercellularibus mesophyllum late occupantibus efformatum. Disci ascigeri immersi. Asci cylindracei aparaphysati octospori. Sporidia hyalina bilocularia. — Typ. gen. *Lept. atramentaria* (B. et C. ut Rhytisma) Th. et Syd., l. c.

SYNPELTIS Syd., Ann. Mycol. XV, 1917, p. 221, XV, 1917, p. 412. — Stromata superficialia, radiato-contexta, tenuiter crustacea, stomatibus innata; loculi immersi, discreti, rotundati; asci cylindraceo-clavati, 8-spori, paraphysati; sporae hyalodidymae.

1. **Synpeltis Loranthi** Syd., l. c. — Stromata amphigena, saepius hy- 4708
pophylla, usque 1 cm. (vel ultra?) diam., tenuiter crustacea, atra, stomatibus innata, pluries affixa, usque 75 μ alta, radiatim ex hyphis pluristratosis peripheriris fuligineis centralibus obscurioribus 2-3 μ crassis contexta; loculi plani, discreti; asci cylindraceo-clavati; breviter stipitati, 60-75 × 14-16, octospori; paraphyses copiosae, ascos superantes; sporae distichae, subfusoideae, ad apicem rotundatae, ad basim leniter attenuatae 1-septatae, non constrictae, hyalinae, 18-20 × 5.

Hab. in foliis Loranthi pentagoni (Loranthaceae), Banco, Boutoc, Ins. Philipp. (Pat. M. Vanoverbergh).

Sect. 3. Phaeodidymae

HYSTEROSTOMELLA Speg. — Syll. IX p. 1098, XI p. 385, XIV p. 708, XVI p. 655, XVII p. 892, XXII p. 556.

1. **Hysterostomella circularis** Har. et Pat. in Bull. Mus. Hist. Nat. Paris 1911, p. 368. — Epi-rarius hypophylla; perithecis numerosis concentrice 6-8 dispositis, coalitis, 6 mm. diam. attingentibus (singulo 0,5 mm.) exiguis, atris, dimidiato-convexis, basi in cuticulam impressis, circulatim rarius radiatim rima lineari dehiscentibus, distinctis dein margine in stroma compositum dimidiato-convexum, carbonaceum, ostiolis circularibus notatum confluentibus; perithecis exterioris seriei diutius plus minusve distinctis; ascis numerosis, hyalinis, apice brunneolis rotundatisque, cylindraceis, fere sessilibus, 65 × 12; sporidiis distichis, primitus hyalinis dein pallide brunneis, ellipsoideis, 1-septatis, utraque apice rotundatis, ad septum non vel vix constrictis, 12 × 5-6; paraphysibus linearibus. 4709

   Hab. in foliis arboris cujusdam coriaceis, Chari, Bongoran, Congo gallico.

2. **Hysterostomella Puiggarii** Spegaz., Rel. Mycol. trop. etc. in Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 148. — Ita vocanda *Hyst. rhytismoides* Spegaz., quia jam extat *Hyst. rhytismoides* Rehm (= ? Lembosia rhytismoides Schw.). 4710

HYSTEROSTOMINA Theiss. et Syd., Ann. Myc. XIII, 1915, p. 228; XV, 1917, p. 409. — Est *Hysterostomella* paraphysata.

1. **Hysterostomina tenella** (Syd.) Th. et Syd., Ann. Myc. XIII, 1915, p. 228, *Hysterostomella tenella* H. et P. Syd., Ann. Mycol. X, 1912, p. 442. — Stromatibus amphigenis v. caules plus minus ambientibus, effusis irregularibus 2-10 μ long., tenuissime crustaceis, arcte adnatis, atris, glabris; loculis seu perithecis numerosis, irregularibus, rimose v. irregulariter dehiscentibus, minutis; ascis primitus subglobosis v. ovatis cum sporidiis conglobatis, dein clavatis cum sporidiis distiche ordinatis, ad apicem valde incrassatis, 45-60 × 16-20, octosporis; sporidiis ellipsoideo-oblongis, utrinque rotundatis, medio v. circa medium 1-septatis et constrictis, ex hyalino brunneis, 14-17 × 7-8. 4711

   Hab. in foliis Asparagi striati (Liliaceae), Despatch pr. Uitenhage, distr. Uitenhage, Cape Prov. (J. B. Pole Evans), in caulibus ramisque Asparagi sp., Kentani, Cape Prov., Africa austr. (Miss A. Pegler).

2. **Hysterostomina Bakeri** Theiss. et Syd., Ann. Mycol. XIV, 1916, p. 444. — Stromatibus epiphyllis, rotundatis v. irregularibus, saepe confluentibus, 1 cm. usque latis, applanato-membranaceis, opace nigris, 70-100 μ altis; loculis confertis, rimose erumpentibus; con- 4712

textu superne radiato, atro-brunneo; basi sporigera 10 μ cr.: ascis ovoideis, dein elongatis, 40-55 × 16-22. 8-sporis; sporidiis initio conglobatis, dein subdistichis, 18-21 × 6 7, oblongis, hyalinis dein brunneis, bilocularibus, non v. leviter constrictis, cellula sup. saepe breviore et latiore; paraphysibus subclavatis.

Hab. in foliis Astrocaryi sp. (Palmae), Parà in Horto Goeldiano, Brasilia (C. F. Baker).

LEMBOSIODOTHIS v. Höhnel, Ber. deutsch. bot. Ges. XXXV, 1917, 4713
p. 359 (nomen nudum); Ann. Mycol. XV, 1917, p. 369. — Mycelium superficiale. Ascomata superficialia valida. Hypostroma subcuticulare, dendritice contextum. Disci ascigeri elongati, scutello radiante praediti. Asci octospori, paraphysati. Sporidia brunnea bilocularia. — Typus gen. *Lemb. Dickiae* v. Höhn. (= Aulographum maculare B. et Br. var. Dickiae Rehm).

DOTHIDASTEROMELLA v. Höhnel, Fragm. z. Mykol. X n. 491 (1910); 4714
Theiss. et Syd., Ann. Mycol. XIII, 1915, p. 229; XV, 1917, p. 409.— Mycelium superficiale setulosum. Ascomata superficialia centro adnata. Hypostroma subcuticulare, radiatum, margine lacinulatum. Disci ascigeri rotundati pauci scutellati. Asci octospori, paraphysati. Sporidia bilocularia brunnea. — Typ. gen. *Doth. sepulta* (B. et C.) v. Höhn.

SCOLIONEMA Theiss. et Syd., Ann. Mycol. XV, 1917, p. 410. — *Do-* 4715
thidasteromellae affinis sed differt mycelio superficiale hyphis setuliformibus erectis praedito, nec non ascis sporidiisque magnis, paraphysibus nullis. — Typus gen. *Sc. Palmarum* (Kze. ut Myxothecium) Theiss. et Syd. (= Asterina Palmarum Gaill.).

DOTHIDASTEROMA v. Höhn., Fragm. z. Mykol. IX, 1909, n. 443.— 4716
Theiss. et Syd., Ann. Mycol. XIII, 1915, p. 231; XV, 1917, p. 410.— Est *Dothidasteromella* mycelio superficiali destituta. — Typus gen. *Doth. maculosum* (B. et Br. ut Rhytisma) v. Höhn.

ASTERODOTHIS Theiss., Ann. Mycol. X, 1912, p. 179 — Theiss. et 4717
Syd., Ann. Mycol. XIII, 1915, p. 233; XV, 1917, p. 410. — Ascomata superficialia, centro innata, carbonacea, supra radiato-contexta, periphaerice hyphas ramosas radiantia emittentia. Disci ascigeri rotundati in pulvinulo centrali inordinate dispositi. Asci octospori

paraphysati. Sporidia brunnea bilocularia. — Typus gen.: *As. solaris* (Kalch. et Cke. ut Asterina) Theiss. l. c. (Syn. Lembosia Albersii P. Henn., Seynesia elegantula Syd.).

POLYRHIZON Theiss. et Syd., Ann. Mycol. XII, 1914, p. 281; XIII, 1915, p. 234; XV, 1917, p. 410. — Ascomata superficialia, rotundata, orbicularia e pluribus ascomatibus circinantibus concreta; ascomata singula centro minuta, disci ascigeri rotundati immersi, hypothecio molliusculo, supra plechtenchymatico, marginem versus radiato-contexta. Asci octospori, paraphysati. Sporidia bilocularia brunnea.

1. **Polyrhizon Terminaliae** (Syd.) Theiss. et Syd., Ann. Mycol. l. c., 4718
Dothidea Terminaliae Syd. in Syd. et Butl., Ann. Mycol. IX, 1911, p. 401. — Stromate epiphyllo, orbiculari, 2-3 mm. diam., tenui, atro, crustaceo; peritheciis basi immersis, parte superiore protuberantibus, plus minus distincte circulariter dispositis, irregularibus, carbonaceis, ca. 200 μ diam.; ascis clavato-cylindraceis, paraphysatis, 70-90 × 14-16, octosporis; sporidiis distichis, oblongo-ellipsoideis v. ellipsoideis, medio v. circa medium 1-septatis et constrictis, uno fine rotundatis, altero plerumque leniter attenuatis, fuscis, asperulis, 17-24 × 7-10, loculo superiore, latiore.

Hab. in foliis Terminaliae Catappae (Combretaceae), Wynaad, Indiae or. (W. Mc Rae).

PLACOASTERELLA Sacc., Ann. Mycol. VIII, 1910, p. 338. — Theiss. 4719
et Syd., Ann. Mycol. XIII, 1915, p. 236; XV, 1917, p. 411. — Mycelium superficiale, ramosum, septatum, exhyphopodiatum. Ascomata superficialia minuta asterinoidea, hypostromate epidermali innata, contextu interno et hypothecii laetiore molliusculo. Disci ascigeri pauci v. solitari. Asci aparaphysati octospori. Sporidia brunnea bilocularia. — Typus gen. *Pl. Schweinfurthii* (P. Henn. ut Asterella) Sacc., nec non *Pl. Rehmii* (P. Henn. ut Asterella) Sacc.

HYSTEROSTOMA Theissen, Ann. Mycol., XI, 1913, p. 509; Theissen et Syd., Ann. Mycol. XIII, 1915, p. 237, XV, 1917, p. 411. —Ascomata membranae epidermidis exteriori adnata, scutata, carbonacea, periphaerice in hyphas radiantes dissoluta. Disci ascigeri, pluries inordinate dispositi, centro colliculosi, rotundati v. elliptici. Asci paraphysati octospori. Sporidia phaeodidyma.

1. **Hysterostoma evanescens** (Rehm) Theiss. et Syd., l. c., *Dothidella* 4720

evanescens Rehm. Syll. XIV, p. 676. — Syn. *Hyst. Myrtorum* Theiss. l. c. p. 509, fig. VII. — *Microthyrium pseudodothidea* Rehm in litt., in Theissen, Broteria 1910, fasc. I p. 7. — Characteres generis. Ascomatibus epiphyllis, ambitu circulari 2-5 mm. diam.; hyphis radiantibus brunneis, arcte adpressis, 5 μ crassis, hyphopodiis destitutis; loculis dimensionibus maxime variantibus, rotundato-lenticularibus v. oblongatis, rima longitudinali dehiscentibus; ascis profuse paraphysatis, cylindraceis, octosporis, supra rotundatis, infra breviter pedicellatis, 80-100 × 22-26, basi loculorum insertis; sporidiis distichis, diu hyalinis demum brunneis, 25-28 μ long., bicellularibus, cellula super. subglobosa, 10-13 μ, infer. elongato-conoidea, 16 × 8.

Hab. in foliis Myrtaceae cujusdam, S. Leopoldo, Brasiliae merid.

2. **Hysterostoma orbiculatum** (P. et H. Syd.) Theiss. et Syd., l. c., *Dothidasteromella orbiculata* Syd., Ann. Mycol. X, 1912, p. 41. — Stromatibus amphigenis, sparsis omnino orbicularibus, aterrimis, 3-6 mm. diam., erumpenti superficialibus, ca. 200-325 μ cr., subcarbonaceis, non confluentibus, superficie irregulariter rugulosis, ambitu hyphis longiusculis radiantibus longitudinaliter plerumque dense parallele connexis fuscis aequaliter crassis 4-6 μ lat. distincte septatis vix v. leniter ramosis cinctis; stromatibus ascigeris v. peritheciis numerosis, dense stipatis, irregularibus, subinde curvulis, superne irregulariter dehiscentibus; ascis cylindraceo-clavatis v. clavatis, apice valde incrassatis et rotundatis, 75-140 × 16-32, octosporis; paraphysibus numerosis, crassiusculis, 2-4 μ cr.; sporidiis 1-2-stichis, elliptico-oblongis, utrinque rotundatis, medio 1-septatis et leniter constrictis, fuscis, 20-35 × 12-16. 4721

Hab. in foliis Oleae verrucosae (Oleaceae), Bains Kloof pr. Wellington, Africae Austr. (E. M. Doidge).

3. **Hysterostoma Acokantherae** (P. Henn.) Theiss. et Syd., Ann. Mycol. XIII (1915) p. 238; Sacc., Notae Mycol. XXII p. 189 (R. Acc. Pad. 1917). — *Dimerosporium Acokantherae* P. Henn. — Syll. XI p. 259. 4722

Hab. in foliis vivis Acokantherae abyssinicae (Apocynaceae), Mai Alacti, Nefasit (Hamasen). — Pulchra species, quae nisi stromate superficiali esset praedita, ad Rhytismatoideas, e. gr. ad gen. *Cocconiam*, accedere videretur. Asci ampli, clavati, apice crasse tunicati, 80-90 × 30-35, octospori, copiose filiformi-paraphysati; sporidia constricto-didyma, disticha, initio strato hyalino cincta, 26-28 × 12, diu hyalina, senio brunnea.

PALAWANIA Syd., Philipp. Journ. of Sc., Sect. C., Bot., IX, 1914, n. 2, p. 171. — Theiss. et Syd., Ann. Mycol. XIII, 1915, p. 249; XV, 1917, p. 412. — Ascomata superficialia, carbonacea, radiato-contexta, ex hypostromate subepidermali per stomata erumpenti oriunda. Hypothecium tenue. Disci ascigeri rotundati inaequaliter distributi, discreti. Asci paraphysati octospori. Sporidia phaeodidyma. — Typ. gen. *Pal. grandis* (Niessl ut Microthyrium) Syd., l. c. cum icon. — Syn. *Seynesia calamicola* P. Henn. et Nym.

1. **Palawania Cocoes** Sydow, l. c. p. 172 f. 4. — Stromatibus ascigeris 4723
tota longitudine matrici adnatis, superficialibus, minoribus rotundatis vel oblongis et 0,3-1 mm. longis saepe plus minus confluentibus et tunc multo majoribus, usque 8 mm. longis, atris, opacis, carbonaceis, pluristratosis, in medio crassis, marginem versus tenuioribus, radiatim ex hyphis fuscis 3,5-4,5 μ latis crebre septatis (articulis 6-9 μ longis) rectis vel fere rectis contextis, ad ambitum integris vel lenissime crenatis; hypostromate sub epidermide bene evoluto, strato basali tenui fusco, hypothecio fibroso; loculis in stromatibus minoribus duobus vel paucis, in stromatibus majoribus copiosioribus, discretis, haud confluentibus, non ostiolatis, sed strato obtegente tandem poro rotundo disrumpente; ascis ellipsoideis, sessilibus, apice rotundatis et incrassatis, 50-75 × 20-26, octosporis; paraphysibus numerosissimis, hyalinis, filiformibus, sursum saepe leniter mucoso-conjunctis; sporidiis distichis usque tristichis, oblongo-ellipsoideis, utrinque obtusis vel leniter attenuatis, medio vel circa medium 1-septatis et leniter constrictis, ex hyalino fuscis, 22-24 × 8-10.

Hab. in bracteis Cocoes nuciferae (Palmae), Palawan Taytay, Philippin. (MERRILL).

MELANOPLACA Sydow, Ann. Mycol. XV, 1917, p. 222, p. 412. — Ascomata tenuiter crustacea, contextu radiato, superficialia, ex hypostromate epidermali oriunda, ubique affixa, carbonacea, loculis rotundatis discretis, mycelio libero nullo; hypothecium pallidum, molliusculum; asci octospori aparaphysati. Sporae phaeodidymae.

1. **Melanoplaca Dipteridis** Syd., l. c. — Stromata in maturitate plus minus 4724
late effusa, epiphylla, tenuiter crustacea, plura cm. metientia, atra orbicularia, ex hyphis dense connexis flavo-brunneis vel brunneis 2,5-3,5 μ crassis parallelis septatis composito, superficialia, hypostromate epidermali opaco denso, hypothecio pallido usque subhyalino tenui 10-15 μ crasso, loculi copiosi, dense dispositi, rotundati,

90-130 μ lati, 65-90 μ alti, opaci, discreti, ex hyphis radiantibus obscure olivaceo-fuscis fere opacis ca. 4 μ crassis copiose septatis compositi; in maturitate rotundate vel plus minus irregulariter aperti; asci ovati vel oblongo-ovati, aparaphysati, 8-spori, 42-50 × 25-36; sporae oblongae, utrinque rotundatae, 3-4-stichae, ex hyalino olivaceo-fuscae, medio septatae non vel vix constrictae, 20-22 × 8-9, loculis fere aequalibus vel supero paullo breviore sed latiore.

Hab. in foliis Dipteridis conjugatae (Polypodiaceae), Panai, Benguet, Ins. Philipp. (Mary Strong Clemens).

PARMULINA Theiss. et Sydow, Ann. Mycol. XII, 1914, p. 194; XIII, 1915, p. 195; XV, 1917, p. 406. — Ascomata rotundata superficialia, radiatim contexta, centro adnata. Disci ascigeri e centro radiantes. Asci octospori paraphysati. Sporidia bilocularia brunnescentia. — Typ. gen.: *Parm. exculpta* (Berk.) Th. et Syd., etc.

1. **Parmulina ? asterophora** G. Arnaud, Ann. École Agricult. Montpellier t. 16., 1918, p. 118, tab. X. — Stromatibus 1,2 mm. diam., carbonaceis, circularibus, margine lobulatis lacinulatisque; ascis oblongis, ventricosis, erectis, strato paraphysoideo circumdatis; sporidiis bilocularibus brunneis, 16,5 × 7,5, loculis subaequalibus. 4725

Hab. in foliis Miconiae (Melastomataceae), San Francisco das Campos, San Paulo, Brasiliae (F. Noak).

MONORHIZA Theiss. et Syd., Ann. Mycol. XIII, 1915, p. 218; XV, 1917, p. 409. — Ascomata rotundata, superficialia, tenuiter crustacea, radiatim contexta, centro innata. Disci ascigeri numerosi, lineares, irregulariter distributi. Asci octospori, paraphysati. Sporidia bilocularia brunnea. — Typ. gen. *Mon. longissima* (Rac. ut Lembosia) Th. et Syd., *Mon. nervisequia* (Berk., Sacc. ut Dothidella) Th. et Syd. 4726

MONORHIZINA Theiss. et Syd., Ann. Mycol. XIII, 1915, p. 220; XV, 1917, p. 409. — A gen. *Monorhiza* tantum differt quia aparaphysatum. — Typ. gen. *Mon. filicina* (Bk. et Br., ut Rhytisma) Th. et Syd. 4727

RHIPIDOCARPON Theiss. et Syd., Ann. Mycol. XIII, 1915, p. 197; XI, 1913, p. 456 (ut Subgen.); XI, 1917, p. 406. — Ascomata flabellata, ex hypostromate subepidermico lateraliter orta, superficialia, radiatim contexta. Disci ascigeri lineares e centro radiantes. Asci 4728

octospori, paraphysati. Sporidia brunnea bilocularia. — Typ. gen.: *Rh. javanicum* (Pat.) Th. et Syd.

POLYCYCLUS v. Höhn., Fragm. z. Myk. IX, n. 465 (1909); Theiss. et Syd., Ann. Mycol. XIII, 1915, p. 210; XV, 1917, p. 408. — Ascomata superficialia, radiatim contexta, centro adnata. Disci ascigeri annulatim concentrice dispositi, quandoque interrupti. Asci octospori, aparaphysati. Sporidia bilocularia brunnea, inaequaliter septata. — Typ. gen. *Pol. andinus* (Pat. ut Hysterostomella) Th. et Syd. 4729

INOCYCLUS Theiss. et Syd., Ann. Mycol. XIII, 1915, p. 211; XV, 1917, p. 408. — Ascomata superficialia, radiatim contexta, centro adnata. Disci ascigeri annulatim dispositi margine radiantes. Asci octospori, aparaphysati. Sporidia bilocularia brunnea. — Typ. gen. spec. saeq. nec non *In. Myrtacearum* (Rehm ut Hysterostomella) Th. et Syd.

1. **Inocyclus Psychotriae** (Syd.) Th. et Syd., l. c., *Hysterostomella Psychotriae* Syd., Enum. Philipp. Fgi., I, in Philipp. Journ. of Sci. VIII (1913) p. 275. — Stromatibus hypophyllis, plerumque plus minusve dense aggregatis, subinde 1-2 confluentibus, plerumque rotundatis, 0,5-1,25 mm. diam., atris, opacis, superficialibus, planis, membranaceis, facile secedentibus, centro plerumque tuberculo minuto punctiformi praeditis, marginem versus irregulariter radiatim contextis ibique ex hyphis dense connatis, fuscis, 2-3 μ cr. compositis; loculis irregulariter dehiscentibus, tandem late apertis; ascis clavatis, apice rotundatis, deorsum leniter attenuatis, subsessilibus, aparaphysatis, 32-40 × 8-10, octosporis; sporidiis distichis, intra ascos tantum visis, 1-septatis, oblongis, 9-12 × 3-4, fuscidulo-coerulescentibus, sed haud jam maturis. 4730

Hab. in foliis vivis Psychotriae luzoniensis (Rubiaceae), Luzon, Prov. Rizal, Antipolo (M. Ramos). — Fructificatio immatura, inde species rursus inquirenda.

COCCONIOPSIS G. Arnaud, Ann. École Nat. Agricult. Montpellier, t. 16., 1918, p. 113, tab. VIII. — Stroma centro tantum radicato; loculo ascigero annulari, simplici. Sporidia bilocularia, locula subaequalia, hyalina v. brunnea. — Gen. inter *Polycyclus* et *Inocyclus* medium. Species typica *Scolecopeltis Theisseni* Rick p. p. et tunc *Cocconiopsis Theisseni* (Rik?) Arnaud vocanda. 4731

Sect. 4. Hyalophragmiæ

GILLETIELLA Sacc. et Syd. — Syll. XIV p. 691.

1. **Gilletiella apiahyna** Spegaz., Rel. Mycol. trop. etc. in Bol. Ac. Nac. Cienc. Cordoba, t 23, 1919, Extr. p. 146. — Amphigena; thallus superficialis suborbicularis lobulatus, prosenchymatico-radians subhyalinum parum perspicuum per aetatem subevanescens; thyriothecia primo thallo albo tecta, serius nuda scutato-dimidiata, 150-200 μ diam., atra nitidula coriacea, ostiolo latiusculo rotundo 20 μ diam. perforata; asci obclavulati, apice obtuse rotundati, basi cuneati breviter crasseque pedicellati, 8-spori, 75-50 × 9, paraphysibus filiformibus hyalinis obvallati; sporae distichae angustae subfusoideae, utrinque acutiuscule rotundatae, initio 1-, dein 3- septatae, ad septa non constrictae, hyalinae, 13-15 × 3. 4732

Hab. ad folia coriacea viva Lauraceae ?, prope Apiahy, Brasilia (J. Puiggari).

2. **Gilletiella late-maculans** Rehm, Ascomyc. Philipp. VI, Leaflets of Philipp. Botany, VI (1914) p. 2278. — Peritheciis dimidiato-scutatis, discoideo-convexulis, nigris, poro vix conspicuo pertusis, 300-500 μ diam., in medio thalli superficialis vegetativi, membranaceiradiatim prosenchymatice excurrentis, subhyalinis formatis, parenchymatice fusce contextis, siccis applanatis, irregularibus; thallis mox confluentibus in maculas orbiculares 1 cm. circ. latas, viridulas, interdum obscurius marginatas; ascis clavatis, apice valde incrassatis, 40-45 × 12-15, octosporis, paraphysibus gelatinoso-conglutinatis intermixtis; sporidiis tristichis, oblongo-clavatis vel fusiformibus, rectis, 3-(interdum 2-) septatis, non constrictis, hyalinis, senectute interdum fuscidulis, 12-15 × 3-4. 4733

Hab. ad « Arenyam », Los Baños, ins. Philipp. (S. A. Reyes).

Sect. 5. Phaeophragmiæ

ACTINODOTHIS Sydow, Philipp. Journ. of Sc. Sect. C., Bot., IX, n. 2, 1914, p. 174. — Theiss. et Syd., Ann. Mycol. XIII, 1915, p. 254, XV, 1917, p. 413. — Ascomata superficialia, orbicularia, radiatocontexta, pluristratosa; disci ascigeri 1-plures discreti, ex hypostromate epidermali parco oriundi, pluries affixi, hypothecio tenui, laeto, fibroso. Margine in hyphas liberas radiantes ramosas dissoluto. Asci aparaphysati bispori. Sporidia brunnea 4-5 locularia.

1. **Actinodothis Piperis** Sydow, l. c. p. 175 f. 6.— Stromatibus epiphyllis, singulis subinde hypophyllis, sine maculis, sparsis, superficialibus, ambitu semper orbicularibus, 1,5-3 mm. diam., discoideis, lenissime convexis, parte marginali plano quasi alatis, carbonaceis, opacis, radiatim contextis, centro ex hyphis crebre septatis compositis, parte marginali libero matrici haud adnato ex hyphis radiantibus valde dendriticeque ramosis (ramulis obtusis) fuscis 7-12 μ latis septatis (articulis 9-15 μ longis) composito; loculis 1 vel pluribus, sive paucis (2-4), sive copiosioribus (usque 15) in quoque stromate, discretis, haud confluentibus, non ostiolatis, sed tandem superne apertis, minutis; hypostromate in vel sub epidermide parce evoluto, filiformi, hypothecio pallido, strato basali tenui brunneolo; ascis ovatis vel oblongo-ovatis, apice obtusis, bisporis, aparaphysatis, 42-50 × 20 26; sporidiis parallele positis, oblongis, utrinque late rotundatis, 3-4 septatis, ad septa leniter constrictis, fuscis, 33-40 × 12-15. 4734

Hab. ad folia viva P i p e r i s sp. (Piperaceae), Palawan, Taytay Mt. Capoas, in ins. Philippinis.

Sect. 6. Hyalodictyæ

MENDOGIA Rac. 1900.— Syll. XVI, 669. — Syn. *Uleopeltis* Hen. 1904.— Syll. XVII p. 872. — Huc pertinent *Mendogia bambusina* Rac. (= Mendogia bambusina Syd., Ann. Myc. XII 1914, p. 565 fig. 3, sub Uleopeltis), *Mend. manaosensis* (P. Henn.) Th. et Syd. 4735

PLEIOSTOMELLA Syd., Ann. Mycol. XV, 1917, p. 221, p. 413. — Stromata superficialia, orbicularia, pluries affixa, hypostromate epidermali radiato-contexta, carbonacea, mycelio libero nullo, loculis annulatim dispositis sed discretis, rotundatis; hypothecium brunneolum; asci clavati, 8-spori, paraphysati; sporidia murali divisa, hyalina.

1. **Pleiostomella philippinensis** Syd., l. c. — Stromata ascophora superficialia, sparsa, rotundata 2-4 mm. diam., plana, obscura brunnea, 140-180 μ alta, radiato-contexta strato tegente opaco 30-35 μ crasso, hypothecio brunneolo 15-20 μ crasso; loculi numerosi, dense concentriceque dispositi, sed discreti, rotundati, 70-170 μ lati; asci clavati, 42-55 × 16-19, ad apicem incrassati, octospori, paraphysibus mox mucosis praesentibus; sporae distichae, oblongae utrinque rotundatae, hyalinae (an semper?) transverse 5-6-septatae ad septum saepe constrictae, septis tenuissimis, cellulis pluribus vel omnibus 4736

septo longitudinali vel obliquo divisis, plasmate granuloso 16-18 × 5-6.

Hab. in foliis P a l m a e cujusdam indet., Biliran Ins. Philipp. (R. C. Mc Gregor). — Habitus fere *Uleopeltis*.

Sect. 7. Scolecosporæ

CHAETASPIS Syd., Ann. Mycol. 15., 1917, p. 219. — Stromata orbicularia, superficialia, irregulariter radiato-contexta, puncto centrali orbicularia, superficialia hyphis vel setulis erectis tecta, centro sterili, loculis ascigeris e centro radiatim divergentibus linearibus. Asci paraphysati, octospori. Sporidia bicellularia, pallide olivacea. Conidia continua, aciculari-fusoidea, hyalina.

1. **Chaetaspis Stenochlaenae** Syd., l. c. — Stromata hypophylla, singula subinde etiam epiphylla, facillime secedentia, orbicularia, 2-4 mm. diam., superficialia, centro affixa ad superficiem hyphis vel setulis erectis continuis ad apicem obtuse attenuatis atro-olivaceis solitariis vel ad basim paucis coalitis, 70-120 µ longis 2-2,5 latis, laxe obsita, centro sterili pro ratione (praecipue in stromatibus junioribus) magno, $^{3}/_{4}$-$1\,^{1}/_{4}$ mm. diam.; irregulariter irradiatim ex hyphis remote septatis rectiusculis pallide brunneis vel olivaceo-brunneis 2-2,5 µ latis ad peripheriam autem saepe anastomosantibus et irregulariter contextis composita; loculi e centro peripheriam versus radiatim positi, subinde irregulariter positi, usque 1 mm. longi, rima 70-100 µ lata aperti; asci parce paraphysati, clavati, 40-50 × 10-12,5. 4737

Hab. in foliis S t e n o c h l a e n a e p a l u s t r i s, Prov. Laguna (Mc. Gregor), San Atonio Prov. Laguna, Ins. Philipp. (M. Ramos).

Subfam. 3. Microthyrieae

Trib. 1. Microthyrinae

Conspectus, Gen. Microthyriacearum sec. Th. et Syd.

3. Microthyriaceae (Sacc., Syll. Fung. II (1883) p. 658). — Theissen, Myc. Centralbl. 1913, p. 281; Theiss. et Syd., Ann. Mycol. 15., 1917, p. 413.

A. Mycelium distinctum nullum — Microthyrieae Sacc. et Syd.

I. Hymenia polyasca

a) Thyriothecia (fructificatio) rotundata

1. Sporidia continua hyalina

α) Paraphyses praesentes — Myiocopron Speg.

β) Paraphyses nullae — Peltella Syd.

2. Sporidia bilocularia

α) hyalina — Microthyrium Desm.

β) brunnea — Seynesia Sacc. (= Ferrarisia Sacc.)

3. Sporidia trilocularia, brunnea — Scutellum Speg.

4. Sporidia 4-plurilocularia

α) hyalina

* Thyriothecia setulis destituta — Phragmothyrium v. H.

** Thyriothecia setulis peristomalibus praedita — Caenothyrium Th. et Syd.

β) brunnea — Halbania Racib.

b) Thyriothecia linearia

1. Sporidia hyalodidyma; paraphyses nullae — Aulographella v. H.

2. Sporidia phaeodidyma

α) Paraphyses praesentes — Lembosina Th.

β) Paraphyses nullae — Morenoina Th.

II. Hymenium monascum

a) Asci in coronam periphaericam distributi — Stephanotheca Syd.

b) Asci diffusi

1. Sporidia phaeophragmia — Pycnopeltis Syd.

2. Sporidia hyalodictya — Pycnoderma Syd.

B. Mycelium distinctum praesens — Asterineae Sacc. et Syd.

I. Thyriothecia hymeniis plurimis praedita — Symphaster Th. et Syd.

II. Hymenium singulum (polyascum)

×. Thyriothecia rotundata

a) Sporidia continua hyalina — Calothyriella v. H.

b) Sporidia hyalodidyma

α) Sporidia caudata; hyphopodia praesentia — Caudella Syd.

β) Sporidia ecaudata; hyphopodia nulla — Calothyrium Th.

c) Sporidia phaeodidyma

α) Hyphopodia nulla

1. Thyriothecia glabra, non incrustata — Asterinella Th.

2. Thyriothecia setuligera, mucoso-incrustata — Asteromyxa Th. et Syd.

3. Thyriothecia glabra, non incrustata; mycelium leve, conidiis quadriloculariibus praeditum — Clypeolina Th.

4. Mycelium setuligerum, conidiis quadrilocularibus praeditum; thyriothecia levia, non incrustata — Thallochaete Th.

β) Hyphopodia praesentia

1. Conidia mycelica quadrilocularia — Clypeolella v. H.
2. Conidia mycelica unilocularia v. nulla

* Thyriothecia demum mucoso-incrustata — Englerulaster v. H.

** Thyriothecia non incrustata

* Paraphyses praesentes — Parasterina Th. et Syd.

** Paraphyses nullae — Asterina Lév. (Syn. Dimerosporium Fuck., Myxasterina v. H.)

d) Sporidia transverse plurilocularia

α) Sporidia hyalina — Halbaniella Th.

β) Sporidia brunnea — Amazonia Th.

e) Sporidia muriformia rubescentia — Yatesula Syd.

××. Thyriothecia linearia

a) Asci 10-12 spori; sporidia continua brunnea — Lembosiella Sacc.

b) Asci 8-spori; sporidia bilocularia

α) Sporidia hyalina; hyphopodia nulla

* Paraphyses praesentes — Lembosiopsis Th.

** Paraphyses nullae — Aulographum Lib.

β) Sporidia brunnea

* Hyphopodia nulla

. Paraphyses praesentes — Echidnodes Th. et Syd.

.. Paraphyses nullae — Echidnodella Th. et Syd.

** Hyphopodia praesentia

. Paraphyses praesentes — Lembosia Lév.

.. Paraphyses nullae — Morenoella Speg.

Genera removenda quia incertae sedis: *Actiniopsis* Starb., *Asteridiella* Mc Alp., *Chaetothyrium* Speg., *Kusanobotrys* P. Henn., *Ophiopeltis* Alm. et Cam., *Pemphidium* Mont., *Phaeosaccardinula* P. Henn., *Piptostoma* B. et Br., *Saccardinula* Speg., *Trichothyrium* Speg., *Trichopeltopsis* v. H., *Schenckiella* P. Henn. (Agyrieae sec. Th. et Syd.).

Genera reicienda: *Cryptopeltis* Rehm (Lichen), *Puiggariella* Speg. (Lichen), *Asteropeltis* P. Henn. (Lichen), *Asterella* Sacc. (= Asterina), *Asterula* Sacc. (= Venturia), *Asteronia* Sacc. (= Asterostomella v. Vizella), *Asteridium* Sacc. (= Meliola).

Sect. 1. Hyalosporae

MYIOCOPRON Speg. — Syll. II p. 659, IX p. 1053, XI p. 379, XIV p. 686, XVI p. 633, XVII p. 861.

1. **Myiocopron umbilicatum** Spegaz., Rel. Mycol. trop. etc. in Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 134. — Subiculum nullum; thyriothecia amphigena, hinc inde gregaria usque 3-5 mm. diam., parva, 150-250 mm. diam., scutato dimidiata, atra glabra opaca coriacea, eximie umbilicato-ostiolata, contextu prosenchymatico-radiante peraegre perspicuo; asci e membrana basali exsurgentes constipati ovati v. late elliptici, 50 × 30, pseudoparaphysibus crassis subcoalescentibus cincti, 8-spori; sporae ellipsoideae utrinque rotundatae, laeves, hyalinae, 18 × 11. 4738

   Hab. ad folia dejecta subputrescentia Bignoniaceae cujusdam (? Amphilophium), prope Apiahy, Brasilia (J. Puiggari).

2. **Myiocopron Casearíae** Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires, XXIII (1912) p. 79. — Peritheciis epiphyllis, laxissime gregariis, dimidiato-scutatis, vix convexulis, 350-500 μ diam., atris, tenui-membranaceis, subiculo omnino carentibus, contextu centro fusco, ambitu subhyalino et subanhysto, obscure ostiolatis; ascis obclavatis, crassiuscule tunicatis, filiformi-paraphysatis, 80 × 15-18; sporidiis clavulatis, rectis vel leniter inaequilateris, medium infra abrupte attenuatis basique acutatis, continuis, hyalinis, 25-30 × 5-6. 4739

   Hab. in foliis vivis Caseariae silvestris (Flacourtiaceae), in dumetis prope Calilegna, Jujuy, Argentina.

3. **Myiocopron Pandani** v. Höhnel, Ann. Mycol., 17., 1919, p. 115. — Thyriotheciis nigris, epiphyllis in plagulis indefinitis crassiusculis, irregulariter rotundatis v. elongatis 200-500 μ long. 100-200 μ latis, saepe 2-3 confluentibus; scutellis obscure brunneis parum subpellucidis, hyphis 2-4 μ cr. radiantibus praeditis, margine fimbriatulo; subiculo nullo; ostiolo irregulari plus minus elongato demum lato; ascis late ellipsoideis supra crasse tunicatis, poro praeditis, 26-30 × 18-20; sporis hyalinis, tenuiter tunicatis, contentu granuloso, semper continuis, elongato-ellipsoideis v. leniter clavatis, utrinque rotundatis, in ascos coacervatis, 12-15 × 5-8; paraphysibus praesentibus. 4740

   Hab. ad folia sicca Pandani sp. (Pandanaceae), in Horto Bot. Buitenzorg, Java (v. Höhnel). — Ad Lembosieas transiens.

4. **Myiocopron Stigmatostalycis** P. Henn., Hedw. v. 48 (1908), p. 11.— Peritheciis gregariis, superficialibus, atris, scutellato-dimidiatis, poro pertusis, cellulosis, 250-300 μ circ. diam., confluentibus, atro-subcrustaceis, margine fibrosis; ascis clavatis, apice rotundatis, octosporis, paraphysatis, 45-60 × 13-18; sporidiis subdistichis, ellipsoi- 4741

deis vel ovoideis, granuloso-farctis, continuis, hyalinis, 8-13 × 4,5-5,5.

Hab. in pseudobulbis Stigmatostalycis radicantis, Capital, S. Paulo, Brasilia.

PELTELLA Sydow, Ann. Mycol. 15., 1917, p. 237, p. 416. — Thyriothecia superficialia, dimidiata, inversa, radiata, saepe confluentia, mycelio nullo; asci ovati octospori, aparaphysati; sporidia continua, hyalina. — Est *Myiocopron* aparaphysatum.

1. **Peltella conjuncta** (Syd.) Syd., l. c., *Myiocopron conjunctum* H. et P. Sydow, Ann. Mycol. XII, 1914, p. 200. — Peritheciis epiphyllis, omnino superficialibus, dense per totam foliorum superficiem distributis eamque omnino aequaliterque obtegentibus, plerumque compluribus valde approximatis et omnino confluentibus, atris, singulis 100-160 μ diam., contextu radiatim prosenchymatico fuligineo ex hyphis amoene radiantibus rectis 2-2,5 μ crassis crebre septatis (articulis 8-12 μ longis, in centro 5-6 μ longis) composito; ascis ovato-globosis, 28-32 × 20-25, mucose paraphysatis; sporidiis conglobatis, ovatis vel ovato-oblongis, continuis (an semper?), hyalinis, 14-17 × 7-8, intus multiguttulatis. 4742

Hab. in foliis Demonoropis (Palmae), Los Baños prov. Laguna ins. Philippin. (C. F. Baker).

Sect. 2. Hyalodidymae

MICROTHYRIUM Desm.— Syll. II p. 662, IX p. 1055, XI p. 379, XIV p. 687, XVI p. 635, XVII p. 862, XXII p. 516.

1. **Microthyrium Ramosii** Syd., Ann. Mycol. XV, 1917, p 238. — Thyriothecia hypophylla, in greges 3-6 mm. diam. parum perspicuos densiuscule disposita orbicularia, 70-90 μ diam., radiatim ex hyphis rectis creberrime septatis (articulis centralibus fere cubicis 2,5-3,5 μ diam., marginem versus longioribus, peripheric is usque 6 μ longis) fuscidulis composita, ambitu hyphis perpaucis tenerrimis hyalinis vel subhyalinis cincta vel suffulta; asci ovati ad apicem rotundati, aparaphysati, octospori, 25-34 × 12-15; sporae ovato-ellipsoideae vel oblongae, medio 1-septatae, non constrictae, hyalinae, 10-12 × 3-4. 4743

Hab. in foliis Aganosmae acuminatae (Apocynaceae), Rizal, Luzon, Ins. Philipp. (M. Ramos).

2. **Microthyrium annuliforme** H. Sydow, Ann. Mycol. XII, 1914, p. 488. — Thyriotheciis epiphyllis, maculis orbicularibus 4-8 mm. diam., sordide albidis lenissime bullatis insidentibus, praecipue ad marginem 4744

macularum annuliformiter dispositis, rotundatis, 100-140 μ diam., atris, ex hyphis rectis crassis 3,5-4,5 μ latis crebiuscule septatis (articulis 9-12 μ longis) fuscis amoene radiantibus strato simplici compositis; ascis aparaphysatis, globulosis usque ovatis, 8 sporis, 35-45 × 30-35; sporidiis conglobatis, ovato-ellipsoideis, infra medium 1-septatis, loculo supero 10-14 μ, infra 6-8 μ longo, totis 18-23 × 7-10, hyalinis, rotundatis.

Hab. in foliis vivis Capparidis sepiariae (Capparidaceae), Iruttupallam, Coimbatore Madras Pres., Indiae or. (W. Mc Rae).

3. **Microthyrium Imperatae** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 561. — Thyriotheciis superficialibus, sine maculis et sine mycelio, sparsis v. saepius maculiformiter aggregatis, orbicularibus, 100-150 μ diam., atris, sub microsc. pellucide v. fere pellucide castaneo-brunneis, circa porum centralem rotundum 10-12 μ latum atris et opacis, ex hyphis semper rectis 2,5-3 μ latis crebre septatis (articulis 4-7 μ longis) amoene radiatim contextis, ad ambitum breviter fimbriatis; ascis anguste saccatis, sessilibus, ad apicem obtuse attenuatis et incrassatis, 40-50 × 10, octosporis, aparaphysatis; sporidiis distichis, fusiformibus, medio 1-septatis, non constrictis, utrinque attenuatis, hyalinis, 12-15 × 2,5. 4745

Hab. in foliis languidis v. subemortuis Imperatae cylindricae (Graminaceae), Angat pr. Bulacan, Philippin. (M. Ramos).

4. **Microthyrium senegalense** Speg. in Anal. Mus. Nac. Buenos Aires XXVI p. 128 (1914) c. ic. — Peritheciis in matrice sordide cinerascente superficialibus, sparsis vel laxissime gregariis, atris, dimidiato-scutatis, convexulis, 150-300 μ diam., astomis, glabris, coriacellis contextu indistincto atro opaco; ascis ellipsoideo-cylindraceis, vix pedicellatis, aparaphysatis, 30 × 10; sporidiis distichis, ellipsoideo-subclavulatis, antice rotundatis, postice subacutiusculis, non vel lenissime inaequilateris, medio septatis, non constrictis, eguttulatis, hyalinis, 9 × 3. 4746

Hab. in culmis aridis subputrescentibus Penicillariae hyphoidis (Graminaceae), in sepibus circa Daccar, Senegal.

5. **Microthyrium Lauraceae** P. Henn., Hedw. v. 48 (1908) p. 109. — Peritheciis epiphyllis, gregarie sparsis, dimidiato-scutatis, atris, 1 mm. circ. diam., poro pertusis, contextu reticulato-celluloso, margine radiato; ascis ovoideis, apice rotundatis, tunicatis, 4-8-sporis, 40-65 × 40-45; sporidiis conglobatis, fusoideis, utrinque subacutis vel obtusiusculis, curvulis, 1-septatis, constrictis, hyalinis, 25-35 × 8-10. 4747

Hab. in foliis Lauraceae, Rio Trombetas, ? Parà (A. Ducke).

6. **Microthyrium Browneanum** Sacc., Notae Mycol. XXIV, p. 12 (Bull. Orto bot. Napoli, 1918). — Epiphyllum, remote sparsum, nigrum, superficiale, dimidiatum; peritheciis omnino applanatis, circularibus, subastomis, 600-800 μ diam., contextu irregulariter celluloso, non radiato, fuligineo, ambitu in marginem latiusculum hyalinum extenuato; ascis late ellipsoideis, utrinque obtuse rotundatis, 64 × 52, basi apiculato-stipitatis, aparaphysatis, subtetrasporis; sporidiis parallele 4-seriatis, tereti-oblongis, utrinque obtusis v. acutiusculis, saepe curvatis, constricto-1-septatis, 35-40 × 12-14, hyalinis. 4748

Hab. in foliis Browneae grandicipitis et Saraceae sp. (Leguminosae), in Horto bot. Singapore (Baker). — Pluribus speciebus e. g. *M. longisporo*, *M. Boivini*, *M. Coffeae* et imprimis *M. Millettiae* affine, tamen notis datis videtur sat diversum. Ob contextum non radiantem ad gen. *Dictyothyrium* esset referendum.

7. **Microthyrium patagonicum** Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires XXIII (1912) p. 78. — Peritheciis hypophyllis, sparsis, minutissimis, 85-100 μ diam., scutiformibus, vix convexulis, atris, centro umbilicatis et stellatim perforatis, ambitu integerrimis, membranaceo-parenchymaticis, hyphis paucis (3-6) radiantibus repentibusque, 25-50 × 2-3, chlorinis, simplicibus ornatis, contextu olivaceo; ascis subellipsoideis, brevissime crasseque pedicellatis, apice tunicam incrassatam praebentibus, 30 × 10-14, aparaphysatis, 6-8-sporis; sporidiis 2-3-stichis, subclavulatis, non vel vix inaequilateris, medio septatis, non constrictis, hyalinis, 12-14 × 3-4. 4749

Hab. in foliis vivis Myrtilumae (Myrtaceae), in dumetis secus lacum Nahuel-Huapi, Argentina. — Jam extat *Micr. patagonicum* Speg. 1909 (cnfr. Sylloge XXII p. 516) tamen haec nova species nomine servanda, quia species anterior ad nov. gen. *Stomiopeltella* relata est.

8. **Microthyrium Grammatophylli** Sacc., Notae Mycol. XXIV p. 11 (Bull. Orto bot. Napoli, 1918). — Punctiforme, late et crebriuscule gregarium, nigrum plerumque epiphyllum, superficiale, dimidiatum; peritheciis plano-convexis, ambitu circularibus, 325-450 μ diam., anguste pertusis, contextu obscure celluloso, non radiato, fuligineo, margine cellulis teretiusculis apice rotundatis brunneis fimbriato; ascis breviter clavatis, brevissime noduloso-stipitatis, 45-50 × 16, saepe obliquis, 4-6-sporis, filiformi-paraphysatis; sporidiis tereti-oblongis, distichis, subinde clavulatis apice magis rotundatis, 22 × 6, diu continuis, dein medio 1-septatis non v. vix constrictis, egut- 4750

tulatis, hyalinis.

Hab. in foliis emortuis Grammatophylli speciosi (Orchidaceae), culti in Horto bot. Singapore (BAKER). — Ob contextum non radiatum ad genus *Dictyothyrium* neotericorum spectaret.

9. **Microthyrium elatum** Rehm, Ascomyc. Philipp. II, in Philipp. Journ. of Sci. VIII (1913) p. 254. — Peritheciis in maculis nigris, primitus orbicularibus, 0,5 mm. latis, mox vario modo confluentibus in maculas ellipsoideas irregulares, usque ad 3 cm. longas, 1 cm. latas innatis, solitariis, rarius congregatis, globosis, 100 μ diam., epidermidem fusco-violaceo tinctam hemisphaerice elevantibus vel longitudinaliter plicantibus, poro minutissimo apertis, excipulo proprio carentibus; ascis clavatis, apice rotundatis, sessilibus, octosporis, aparaphysatis, 60 × 15; sporidiis distichis, ovoideis, infra medium, rarissime medio septatis, haud constrictis, hyalinis, 15 × 7-8. 4751

Hab. in petiolis emortuis Coryphae elatae (Palmae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (C. F. BAKER) — Quoad structuram videtur *M. circinans* Speg. valde proximum.

10. **Microthyrium Scutiae** Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires XXIII (1912) p. 79. — Peritheciis saepius epiphyllis, sparsis, minutis, dimidiato-scutatis, 150-200 μ diam., margine repandulo sed integro, atris, glabris, rigidule membranaceis, contextu eximie radiante, centro subostiolatis; ascis obclavatis, apice subtruncatis, basi cuneato-rotundatis, 20-25 × 5-6, aparaphysatis; sporidiis subtristichis anguste clavulato-fusoideis, rectis vel vix inaequilateris, medio septatis, non vel vix constrictis, minutis, hyalinis, 8 × 1,5. 4752

Hab. in foliis vivis Scutiae buxifoliae (Rhamnaceae), in silvis prope Santa Cornelia, Jujuy, Argentina.

11. **Microthyrium Mischocarpi** Syd., Ann. Mycol. XV, 1917, p. 238. — Thyriothecia epiphylla, plura (3-10) in maculis minutis orbicularibus 1-2 mm. diam. viridulis collecta, orbicularia, dimidiata, atra, 140-170 μ diam., minute ostiolata, contextu radiato omnino opaco atro; asci clavati vel ventricosi; 36-48 × 14-16 breviter stipitati, octospori, aparaphysati; sporae distichae, breviter clavatae, superne late rotundatae, basim versus semper attenuatae, supra medium 1-septatae, non constrictae, hyalinae, 12-14 × 13-3,5. 4753

Hab. in foliis Mischocarpi fuscescentis (Sapindaceae), Mt. Maquiling, Laguna, Ins. Philipp. (C. F. BAKER).

12. **Microthyrium Alsodejae** P. Henn., Hedw. v. 48. (1908) p. 109. — Peritheciis epiphyllis, sparse gregariis, dimidiato-scutatis, atris, 4754

0,8-1 mm. diam., poro pertusis, contextu reticulato-celluloso, rufo-fusco, margine subhyalino radiato; ascis ovoideis vel subellipsoideis, tunicatis, octosporis, 70-80 × 45-60; sporidiis conglobatis, oblongis, curvatis, utrinque rotundatis, medio 1-septatis, intus granulatis, hyalinis, 50-60 × 8-12.

Hab. in foliis Alsodeiae sp. (Violaceae), Rio Cumina, ? Parà (A. Ducke).

AULOGRAPHELLA v. Höhnel, Ber. deutsch. bot. Ges. XXXV, 1917, p. 354. — Est Lembosiea subiculo destituta. — Typ. gen. *Aylographella Epilobii* (Lib., ut Aulographum) v. Höhn., l. c. 4755

PROTOTHYRIUM Arnaud, C. R. Ac. Sc. Paris, t. 164., 1917, p. 574. — Ann. École Nat. Agricult. Montpellier, t. 16., 1918, p. 100. — Stroma superficiale, crustaceum, applanatum, cum mycelio interno in tota superficie inferiori anastomosans; sporidia bilocularia. Caeterum ut in Trib. Prototh yrieae Arnaud, l. c. — Species typ. *Prot. Salvadorae* (Cooke) Arn. (=Phyllachora (Dothidella) Salvadorae Cooke, Asterella confluens (Pat.) Sacc. etc.). 4756

Sect. 3. Phaeodidymæ

SEYNESIA Sacc. — Syll. II p. 668, IX p. 1064, XI p. 381, XIV p. 689, XVI p. 639, XVII p. 865, XXII p. 522.

1. **Seynesia Alstoniae** Rehm, Ascomyc. Philipp. V, Leaflets of Philipp. Botany, VI (1914) p. 2227, Ascom. exsicc. 2164. — V. Höhnel, Ann. Mycol., 16., 1918, p. 221. — Peritheciis in epiphyllo haud maculato late sparsis, sessilibus, convexulis, minutissime papillulatis, interdum trigonis, 0,5-1 mm. diam., atris, glabris, dimidiato-scutatis, prosenchymatice-centrifuge contextis, ad marginem hyphis simplicibus, obtusis, discretis, septatis, fuscis, 5 μ latis, 50 μ usque longe excurrentibus, ad apicem demum ramose late apertis; ascis ovatis, crasse tunicatis, 50-70 × 30-40, octosporis, J +; paraphysibus ramosis 2 μ cr., flavido-mucosis; sporidiis ellipsoideo-clavatis, medio, interdum infra medium, septatis et valde constrictis, obscure fuscis, utraque cellula transverse hyalino-zonata, strato mucoso tenui obductis, 27-30 × 12-14. 4757

Hab. in foliis Alstoniae macrophyllae (Apocynaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (S. A. Reyes).

2. **Seynesia clavispora** Rehm, Ascomyc. Philipp. in Philipp. Journ. of Sci. VIII (1913) p. 190. — Maculis hypophyllis, primitus orbicularibus, 4-8 mm. diam., demum confluentibus et late explanatis, nigris, ex hyphis centrifugis, rectis, septatis, vix ramosulis, 3-4 μ latis, hyphopodia non gerentibus, plus minusve dense contextis; peritheciis versus centrum maculae dispersis, dimidiatis, poro pertusis, centrifuge ex hyphis 4 μ cr. parallelis subfusce contextis, glabris, usque ad 200 μ diam., radiatim in hyphas mycelii abeuntibus; ascis permultis, ovato-clavatis, sessilibus, apice crasse tunicatis, 50-60 × 25-30, strato gelatinoso fuscidulo impositis obtectisque; sporidiis parallele positis, elongato-clavatis, apice superiore 5 μ cr. inferiore acutatis, medio septatis, non constrictis, hyalinis, demum brunneis, 35-40 μ longis. 4758

Hab. in foliis Alyxiae moniliferae (Apocynaceae), Luzon, Prov. Laguna, Mt. Maquiling, ins. Philipp. (C. F. Baker).

3. **Seynesia Ipomoeae** Syd., Enum. Philipp. Fungi II, in Philipp. Journ. of Sci. VIII (1913) p. 488. — Mycelio nullo; peritheciis epiphyllis, in maculas 0,5-1,5 cm. latas, circulares dense dispositis, atris, applanatis, pusillis, 55-100 μ diam., stellatim dehiscentibus et aetate plus minus late apertis, contextu radiato atro opaco ex hyphis crassiusculis composito; ascis ovato-globosis, 30-35 × 24-28, aparaphysatis, octosporis; sporidiis conglobatis, ellipsoideo-oblongis, medio 1-septatis et leniter constrictis, utrinque rotundatis, ex hyalino flavo-brunneolis, tandem fuscis, levibus, 15-17 × 7,5-8,5, cellula superiore saepe latiore. 4759

Hab. in foliis vivis Ipomoeae obscurae (Convolvulaceae), Luzon, Manila, ins. Philipp. (Merrill).

4. **Seynesia orbiculata** H. et P. Syd., Ann. Mycol. X, 1912, p. 39. — Peritheciis epiphyllis, in greges omnino orbiculares 4-8 mm. latos densissime aggregatis, radiato-contextis, contextu opaco, plerumque rotundatis et 90-175 μ diam. vel etiam parum elongatis aut irregularibus tunc longioribus, subiculo nullo; ascis ovatis usque clavatis, apice incrassatis, 35-60 × 16-25, octosporis; sporidiis distichis v. conglobatis, ellipsoideis, utrinque rotundatis medio 1-septatis et constrictis, levibus, ex hyalino mox brunneis, 13-18 × 6-8. 4760

Hab. in foliis Eucleae sp. (Ebenaceae), Letaba Drift Zoutpansberg, Transvaal, Africa austr. (E. M. Doidge).

5. **Seynesia costaricensis** Spegaz., Fungi Costaric. nonn., in Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 208. — Maculae nullae v. totum folium pallescenti-flavescens; subiculum nullum; thyrio- 4761

thecia epiphylla, orbicularia, 90-120 μ diam., densissime constipata, inter se fere connata sed non confluentia, plagulas majusculas 4-8 mm. lat., orbiculares atras subcrustaceas matrici arcte adnatas efficientia, membrana basali destituta, ostiolo rotundo 20 μ cr. sed serius radiatim fissili perforata, margine integerrima ex hyphis radiantibus dense congestis creberrime septulatis (parenchyma simulantibus) efformata; asci subovati, mox diffluentes, 8-spori, 38-45 × 30; sporae ellipsoideo-subobovatae, laeves, 1-septatae, ad septum constrictulae, loculo infero quam supero conspicue minore, primo hyalinae serius fuligineae, 20 × 6-7.

Hab. in foliis vivis Gaultheraе odoratae (Ericaceae), in silvis Volcàn de Poàs, Costarica, America trop.

6. **Seynesia Apuleiae** Speg., Mycet. Argent. VI, Anal. Mus. Nac. Bue- 4762
nos Aires XXIII (1912) p. 80. — Peritheciis gregariis, saepius hypophyllis, crustulas nigras irregulares 0,5-5 mm. latas efficientibus, hemisphaerico-scutiformibus, 90-150 μ diam., astomis, fragilibus, per aetatem stellatim dehiscentibus, nucleo carnosulo chlorino farctis; ascis obovatis, breviter crasseque pedicellatis, superne crasse tunicatis, 40-70 × 30-40; sporidiis ellipsoideis medio septatis, non vel vix constrictis, in juventute tunica mucosa, per aetatem evanescente, indutis, obscure fuligineis, 20-28 × 10-12.

Hab. in foliis vivis Apuleiae praecocis (Leguminosae), in silvis prope Puerto Leòn, Misiones, Argentina.

7. **Seynesia ficina** Sydow, Ann. Mycol. XIV, 1916, p. 365. — Perithe- 4763
ciis hypophyllis, dense gregariis, superficialibus, rotundatis vel saepe lobatis, 220-300 μ diam., atris, leniter carbonaceis, irregulariter dehiscentibus, contextu opaco radiato ex hyphis breviter articulatis 3-3,5 μ crassis composito; ascis varialibus, subglobosis, ovatis vel elongatis, 4-8-sporis, plerumque 45-55 × 35-40; sporidiis oblongis, utrinque rotundatis, medio vel circa medium septatis, non vel parum constrictis, levibus, ex hyalino fumoso-brunneis, 23-28 × 10-14; conidiis copiose praesentibus late piriformibus, circa basim 1-septatis, aterrimis, 17-22 × 13-16.

Hab. in foliis Fici notae (Moraceae), Los Baños ins. Philipp. (C. F. Baker).

LEMBOSINA Theiss., Ann. Mycol. XI, 1913, p. 437; Theiss. et Syd., 4764
Ann. Mycol. XV, 1917, p. 417. — Est *Lembosia* mycelio destituta.— Typ. gen. *Lemb. copromyia* (B. R. S.) Theiss., et *Lemb. aulographoides* (B. R. S.) Theiss.

MORENOINA Theiss., Ann. Myc. 11., 1913, p. 434.— Theiss. et Syd., Ann. Myc. 15., 1917, p. 417. — Est *Morenoella* mycelio superficiale destituta. — Typ. gen. est *M. antarctica* Speg.

1. **Morenoina inaequalis** Maubl. et Arn., in Arnaud, Ann. Ecole Nat. Agricult. Montpellier t. 16., 1918, p. 139, tab. XXII. — Maublanc, Bull. Soc. Mycol. de F. t. 36., 1918, p. 40, fig. 10-11. — Maculis epiphyllis, irregularibus, saepe confluentibus. Mycelio externo nullo. Peritheciis dense gregariis, ellipticis, lanceolatis vel elongatis, saepe confluentibus et trigonis vel irregularibus, usque ad 250 μ longis, 80-100 latis, nigris, rima apertis, ex hyphis radiantibus, fuligineis, 2,5-3 μ crassis compositis, ambitu non fimbriato. Ascis ovatis vel piriformibus, subsessilibus, apice late rotundatis et incrassatis, 22-28 × 9-12, 8-sp., aparaphysatis. Sporidiis conglobatis, ellipticis v. subclavatis, pallide fuligineis, infra medium 1-septatis, loculo super. circ. duplo longiore quam infer., levibus, 8-10 × 3,5-4. 4765

Hab. in foliis vivis Myrtaceae cujusdam, Corcovado p. Rio de Janeiro, Brasiliae (A. MAUBLANC).

Sect. 4. Hyalophragmiae

PHRAGMOTHYRIUM v. Höhnel, Fragm. z. Mykol. XVI, 1912, n. 725. — Theiss. et Syd., Ann. Mycol. XV, 1917, p. 416. — Est *Microthyrium* sporidiis hyalophragmiis donatum — ? Typ. gen.: *Phr. corruscans* (Rehm, ut Micropeltis) Theiss.

1. **Phragmothyrium fimbriatum** v. Höhnel, Ann. Mycol., 17., 1919, p. 115. — Thyriotheciis subiculo destitutis, hypophyllis sparsis v. laxe gregariis, rotundatis, 220 μ latis, depressis, nigris, subpellucidis, obscure brunneis structura distincte radiata, margine plus minus fimbriatulo; ostiolis rotundatis 16 μ latis, margine 45 μ crasso limitatis; membrana basali tenui pallide brunnea radiata; paraphysibus nullis; ascis clavatis, infra inflatis, supra rotundatis et crasse tunicatis, sessilibus, 60 × 14; sporis distichis, hyalinis, elongato-fusoideis, quadrilocularibus, circ. 16-20 × 4. 4766

Hab. in foliis adhuc viridibus Ardisiae fuliginosae (Myrsinaceae), in sylva Tjibodas, Java (v. HÖHNEL). — *Phragm. corruscanti* (Rehm.) Th. proximum.

CAENOTHYRIUM Theiss. et Syd., Ann. Mycol. XV, 1917, p. 417. — Mycelium nullum. Thyriothecia superficialia, dimidiata, inversa, radiantia, membrana basali destituta, ostiolo setulis peristomalibus 4767

paucis praedito. Asci hymenium simplicem basalem polyascum efformantes. Paraphyses nullae. Sporidia hyalina, plurilocularia. — Typus gen. *Caenothyrium alang-alang* (Rac., ut Micropeltis) Th. et Syd., l. c. — Syn. *Microthyrium Imperatae* Syd. immaturum (cnfr. pag. 424).

Sect. 5. Phaeophragmiae

SCUTELLUM Speg. — Syll. II p. 668, IX p. 1068, XVI p. 645, XXII p. 530.

1. **Scutellum javanicum** v. Höhn., Fragm. z. Myk. 726, Stzb. Ak. Wiss. Wien CXXI, 1, p. 348 (1912). — Peritheciis amphigenis, superficialibus, planis, atris, nitidulis, sparsis v. laxe gregariis, rotundatis, 250-350 μ diam., ostiolo nullo distincto sed in centro irregulariter apertis, membranaceis, subopacis, in centro minute cellulosis, pseudoparenchymaticis, ad marginem irregulariter sinuosum ex hyphis subparallelis 2 μ cr. obscure brunneis compositis, margine non vel vix fimbriato; ascis octosporis, crasse clavatis superne rotundatis, inferne breviter attenuato-pedicellatis, 64-70 × 33-34, aparaphysatis; sporidiis polystichis, oblongo-clavatis, utrinque rotundatis, 4-locularibus, diu hyalinis dein brunneis, ad septum medium parum constrictis, 30 × 12, loculo secundo superiore parum crassiore. 4768

Hab. in foliis coriaceis Orchidaceae cujusdam, Tjibodas, Java.

PYCNOPELTIS Syd., Ann. Mycol. 14., 1916, p. 365. — Thallus superficialis consistens ex membranis simplicibus (strato cellularum unico) prosenchymatico radiantibus. Loculi (vel pycnothecia) monoascigeri, in ipso thallo formati, orbiculares. Asci aparaphysati. Sporidia phaeophragmia.

1. **Pycnopeltis Bakeri** Syd., l.c. — Membranis hypophyllis, primitus minutis orbicularibus, dein majoribus et saepe ad marginem lobatis, 150-220 μ diam., omnino superficialibus, atris, unistratosis, ex hyphis radiantibus plus minus pellucide brunneis creberrime septatis (articulis 4-7 μ longis, 3-4,5 μ latis) formatis; loculis seu pycnotheciis plerumque ad marginem thalli setis minutis ascum unicum tantum includentibus; ascis globosis vel ovato-globosis, aparaphysatis, brevissime stipitatis, 24-28 × 20-24, octosporis; sporidiis conglobatis, rectis vel leniter curvatis 2-vel saepius 3-septatis, diu hyalinis, tandem brunneis vel olivaceo-brunneis, utrinque rotundatis, haud con- 4769

strictis, 15-18 × 4,5-6.

Hab. in foliis Ardisiae sp. (Myrsinaceae), Los Baños ins. Philipp. (C. F. Baker).

KRIEGERIELLA v. Höhnel, Ann. Mycol. 16., 1918, p. 39. — Subiculum praesens, exhyphopodiatum. Thyriothecia membranacea, acute conoidea, apice breviter cylindracea ostiolata. Paraphyses nullae. Asci pauci inflati, octospori. Sporidia cylindraceo-clavata, brunnea, pluriseptata.

1. **Kriegeriella mirabilis** v. Höhnel, l. c. — Subiculum laxum ex hyphis ramosis brunneis 2-3 μ cr. parce articulatis efformatum. Thyriotheciis sparsis v. seriatis, nigris magis altis quam latis apice rotundatis, 100-150 μ latis 100-160 μ altis, poro 30-35 μ lato apertis; membrana ex hyphis parallele radiantibus brunneis, 2-4 μ cr. tenuiter tunicatis efformato. Asci 2-3, octospori, basi vix pedicellati, supra breviter cylindraceo-rotundati, 60-80 × 32-40; sporidia cylindraceo-clavata recta apice utrinque rotundata, 30-35 × 9-10, sexlocularia, loculis terminalibus parum longioribus (7-9 μ). 4770

Hab. ad acus putres Pini silvestris (Weiss föhre) (Coniferae), Königstein Saxonia, Germania (W. Krieger).

2. **Kriegeriella transiens** v. Höhnel, Ann. Mycol. 16., 1918, p. 40. — Subiculum laxe reticulatum ex hyphis sordide violaceis 2-2,5 μ cr. parce ramosis et articulatis rectiusculis constitutum. Thyriotheciis sparsis saepius seriatis conoideis, 120-240 μ latis 80-100 μ altis, membranaceis, sed membrana basali destitutis, poro terminali rotundato 20 μ diam.; membrana ex hyphis rectis parallele radiantibus connexis obscure brunneis, 2-4,5 μ cr. efformata; ascis 6-10, octosporis basi inflatis apice late rotundatis, 60-64 × 24-28; sporidiis plerumque 5-raro 4-locularibus, apice elongato-clavatis, utrinque rotundatis, 24-28 × 7-9, loculo terminali 8-10 μ longo caeteris 3-4 μ. 4771

Hab. ad acus putres Pini uncinatae (Coniferae), Fichtelberge Saxonia, Germania (W. Krieger).

Sect. 6. Hyalodictyae

STEPHANOTHECA Sydow, Philipp. Journ. of Sc. IX, 1914, p. 178.— Theiss. et Syd., Ann. Mycol. XV, 1917, p. 417. — Mycelium distinctum nullum. Thyriothecia superficialia, radiantia, centro sterilia. Asci singuli in plechtenchyma immersi et zona peripherica anulata efformantes, ovoidei, octospori, aparaphysati. Sporidia elongata,

hyalina, muralia. — Typus gen.:

1. **Stephanotheca micromera** Sydow, l. c. p. 179 fig. 8. — Peritheciis 4772
sparsis, sine maculis, omnino superficialibus, subiculo nullo, atris, 200-300 μ diam., ambitu orbicularibus, haud inversis, centro elevato praeditis, subtus quasi brevissime crasseque pedicellatis, irregulariter radiatim contextis, contextu ex hyphis brevissime parenchymatice septatis crasse tunicatis (articulis 2-3 μ longis et 2-2,5 μ latis) obscure fuscis marginem versus dilutioribus usque subhyalinis compositis; ascis ad marginem peritheciorum in strato diluto sitis, ovatis usque oblongis, sessilibus superne rotundatis 20-28 × 14-19, octosporis, aparaphysatis, quoque asco in loculo proprio sito; sporidiis 2-4-stichis, oblongo-clavulatis, apice late rotundatis basim versus attenuatis, 3-5-septatis non constrictis, cellula una alterave saepe semel verticaliter aut oblique septata, 11-16 × 4,5-5,5.

Hab. in foliis vivis Taxotrophis ilicifoliae (Moraceae), Palawan Lake Mariquao, Ins. Philipp. (MERRILL).

PYCNODERMA H. et P. Sydow, Ann. Mycol. XII, 1914, p. 563 (Etym. *pycnos* et *derma*) Trichopeltacearum. — Thallus superficialis, consistens ex membranis simplicibus (stratu cellularum unico) prosenchymatico-radiantibus orbicularibus confluentibus. Loculi (vel pycnothecia) monoascigeri, in ipso thallo formati, orbiculares. Asci aparaphysati. Sporidia muriformia, hyalina.

1. **Pycnoderma bambusinum** H. et P. Sydow, Ann. Mycol. XII, 1914, 4773
p. 563. — Membranis epiphyllis, primitus minutis orbicularibus, dein majoribus confluentibus et pelliculas forma irregulares saepe lobatas et plerumque elongatas 1-4 mm. longas ca. 1-2 mm. latas formantibus, omnino superficialibus, varii coloris (quoad maturitatem), primitus violaceo-brunneis, dein obscure brunneis, tandem subatris, sub microscopio pellucide brunneis vel ad marginem saepe pellucide flavidulo-brunneis, unistratosis, ex hyphis radiantibus creberrime septatis (articulis 6-10 μ longis et 5-7 μ latis) formatis; loculis seu pycnotheciis plerumque regulariter distributis, minutis ascum unicum tantum includentibus; ascis globosis vel ovato-globosis, aparaphysatis brevissime crasseque stipitatis, 24-27 × 20-25, octosporis; sporidiis conglobatis, oblongo-ovatis, utrinque rotundatis, primitus horizontaliter 3-4-septatis in maturitate 4-5-septatis cum cellulis singulis vel omnibus semel longitudinaliter aut oblique septatis, ad septum medium subinde leniter constrictis, hyalinis, 16-18 × 7-9, rectis vel leniter inaequilateris.

Hab. in foliis vivis v. languidis Bambusae vulgaris et Schizostachyi (Graminaceae), Antipolo pr. Rizal, Ins. Philippin. (M. Ramos).

2. **Pycnoderma circinans** Syd., Ann. Mycol. XV, 1917, p. 236. — Thyriothecia epiphylla, maculis orbicularibus brunneolis 3-5 mm. latis insidentia vel eas circinatim ambientia, fere semper densiuscule et circinatim disposita, primitus minuta orbicularia 150-200 μ diam., tandem (saepe confluendo) majora irregularia et lobata, tunc usque 350 μ diam., brunnea centro ut videtur sterili subatro opaco, ambitu zonula angusta hyalina tandem evanescente cincta, contextu irregulariter minuteque celluloso; hymenia plura in quoque thyriothecio, per totum thyriothecium (centro opaco ut videtur excepto) dispersa, monoascigera; asci ovato-globosi, 20-28 × 18-22, octospori, aparaphysati; sporae conglobatae, oblongo-ellipsoideae, utrinque rotundatae, transverse 3-septatae, non vel vix constrictae, loculis 1-2 plerumque mediis septo singulo longitudinali divisis, hyalinae, 12-15 × 4,5-6. 4774

Hab. in foliis Bambusae sp. (Graminaceae), Catubig River, Samar, Ins. Philipp. (M. Ramos).

3. **Pycnoderma Villaresiae** Syd., Ann. Mycol. XV, 1917, p. 147. — Membranis hypophyllis, sine maculis, in folii superficie plus minus dense distributis, atris, 150-220 μ diam., plerumque ambitu orbicularibus, subinde lobatis, haud raro confluentibus, omnino superficialibus sub microscopio fuligineo-brunneis, centro opacis atro-fuscis, unistratosis, ex hyphis radiantibus creberrime septatis (articulis 4-6 × 3-4) formatis; loculis plus minus regulariter circa centrum sterilem dispositis, 26-35 μ diam., ascum unicum v. paucos includentibus; ascis ovato-globosis, 22-28 × 18-22, octosporis, aparaphysatis; sporidiis clavulatis v. oblongis, utrinque rotundatis v. apice rotundatis, basique tenuatis, rectis v. leniter inaequilateris, hyalinis, 3-septatis, cellula una alterave semel longitudinaliter v. oblique septatis, non constrictis, 13-16 × 3,5-4,5. 4775

Hab. in foliis Villaresiae Gongonhae var. integrifoliae (Icacinaceae), Palmeora Rio Grande do Sul, Brasiliae (Alfr. Bornmüller).

*) *Trib. 2.* **Asterinae** (Sacc. et Syd.)

Conspectus analyticus ASTERINACEARUM

sensu Cl. SPEGAZZINI, *Rel. Myc. trop.* (Bol. Ac. Nac. Cienc. Cordoba, t. XXIII, 1919, Extr. p. 136).

1. Subiculum semper	plane nullum	2
	plus minusve late evolutum	6
2. Thyriothecia	rotunde ostiolata perforata	3
	astoma, serius stellatim dehiscentia	4
3. Sporae maturae	semper hyalinae v. vix chlorinae	MICROTHYRIUM Desm.
	fuligineae	SEYNESIA Sacc.
4. Sporae maturae	fuligineae	(1) SEYNESIOLA Speg.
	semper hyalinae v. chlorinae	5
5. Thyriothecia	glaberrima	(2) MICROTHYRIOLUM Speg.
	setulosa	CHAETOTHYRIUM Speg.
6. Subiculum hyphopodiis	praeditum	7
	omnino destitutum	10
7. Thyriothecia ab initio	rotunde ostiolato perforata	8
	astoma, serius stellatim fissa	9
8. Sporae maturae	semper hyalinae v. vix chlorinae	OPETHYRIUM Speg.
	fuligineae	(3) OPEASTERINA Speg.
9. Sporae maturae	semper hyalinae v. vix chlorinae	HYALASTERINA Speg.
	fuligineae	ASTERINA Lév.
10. Thyriothecia ab initio	rotunde ostiolato-perforata	11
	astoma, serius stellatim dehiscentia	12

*) Genera sec. THEISSEN et SYDOW, l. c., plerumque dubia, tunc removenda v. incertae sedis.

(1) Typ. gen.: *S. chilensis* (Speg.) Speg.

(2) » » : *M. astomum* (Speg.) Speg., *M. circinans* (Speg.).

(3) » » : *O. Aspidii* (Heng.) Speg., *O. Dyctiolomatis* (Heng.) Speg., *O. Elaeocarpi* (Syd.) Speg., *O. Holocalycis* (Speg.) Speg.

11. Sporae maturae	semper hyalinae v. vix chlorinae	(1) CALOTHYRIOLUM Speg.
	fuligineae	(2) OPASTERINELLA Speg.
12. Sporae maturae	semper hyalinae v. vix chlorinae	CALOTHYRIUM Theiss.
	fuligineae	ASTERINELLA Theiss.

Sect. 1. Hyalosporae

*) **ASTERULA** Sacc.— Syll. I p. 47, IX p. 375, XI p. 254, XIV p. 692, XVI p. 646, XXII p. 534.

1. **Asterula Chamaecyparissi** Shirai et Hara in Bot. Magaz. Tokyo XXV (1911) p. 69, tab. 2 fig. 3-5. — Mycelio epiphyllo, ex hyphis radiantibus, brunneis, 3-5 μ crassis, crebre septatis formato; peritheciis mycelio insidentibus, sparsis vel gregariis, scutiformibus, poro circulari minuto in centro elevatulo pertusis, obscure brunneis, membranaceis, radiato-contextis, margine levibus, 150-210 μ diam., cellulis quadratis vel triangularibus, 5 × 2-5; ascis oblongis vel cylindraceis, apice rotundatis, basi breviter crasseque pedicellatis, rectis vel curvatis, aparaphysatis, octosporis, 38-50 × 10-12; sporidiis distichis, ellipsoideis vel oblongis, continuis, intus granulosis vel non, hyalinis, 13-15 × 4-5. 4776

   Hab. in foliis vivis Chamaecyparis obtusae (Coniferae), Prov. Mino, Kawanye-mura, Japonia (K. HARA).

CALOTHYRIELLA v. Höhnel, Ber. d. deutsch. bot. Ges. XXXV, 1917, p. 251. — Est *Calothyrium* Th. sporis hyalinis continuis donatum.— Typus gen:

1. **Calothyriella pinophylla** v. Höhn., Ann. Mycol. XV, 1917, p. 372.— Peritheciis orbicularibus, brunneis, tenuibus, ostiolo rotundo 9-12 μ lato, plano, obsolete marginato apertis, 80-130 μ lat., 20 μ cr., regulariter radiatim contextis, cellulis marginalibus radiatim partitis et in fimbrias pallidiores mutatis; subiculo tenuissimo subhyalino membranaceo; ascis deorsum clavatis ad apicem tenuato-obtusis, 4777

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(1) Typ. gen.: *C. coaguazuense* (Speg.) Speg.

(2) » » : *O. brasiliensis* (Speg.) Speg.

*) Typ. gen. *Ast. Epilobii* Desm., sec. v. HÖHNEL in THEISS. et SYDOW, Ann. Mycol. XV, 1917, p. 424, est *Venturia*, aliae, ad gen. *Asterinam*, ad Dothideaceas, etc. spectant.

36 44 × 7-8, octosporis; sporidiis 2-3-stichis, hyalinis, oblongis, rectis, obtusatis interdum subfusoideis v. clavulatis, continuis, 3-5-guttulatis, 10-13 × 2-2,8; paraphysibus filiformibus sursum ramulosis.

Hab. in acubus Pini austriacae (Coniferae), Sonntagsberg, Austriae inf. (P. P. Strasser).

Sect. 2. Hyalodidymae

AULOGRAPHUM Lib. — Syll. II p. 727, IX p. 1101, XI p. 386; XIV p. 711, XVI p. 659, XVII p. 895 XXII p. 558.

1. **Aulographum Ledi** Peck in N. Y. State Mus. Bull. 150 [1910] p. 23 (1911). — Maculis circularibus, griseo-albidis, margine brunneo vel purpureo-brunneo cinctis; perithecciis epiphyllis, paucis, ellipsoideis vel oblongis saepe confluentibus et substellatim lobatis, erumpentibus, atris; ascis obovatis vel subglobosis; sporidiis ovatis vel oblongis, continuis, demum uniseptatis, hyalinis, 12-15 × 6-8. 4778

Hab. in foliis Ledi groenlandici (Ericaceae), Fine, St. Lawrence co. U. S. A. — Ob ascos subglobosos species facile dignoscenda.

2. **Aulographum melaspileoides** Rehm in Ber. Bayer. Bot. Gesellsch. XIII (1912) p. 103. — Ascomatibus minutissimis, sparsis, sessilibus, linearibus vel rotundatis, atris, nitentibus, rima angustissima apertis, circ. 100 × 50, contextu radiato, ex hyphis brunneis, septatis, parce ramosis, 20-30 × 6-8, composito; ascis ovoideis, octosporis, 40 × 12-14, paraphysibus ramosis tenuibus obvallatis; sporidiis polystichis, clavatis, utrinque rotundatis, medio septatis et ad septum paululo constrictis, utrinque 1-guttulatis, ioculo inferiore interdum 2-guttulato, hyalinis, 10 × 5. 4779

Hab. in caulibus emortuis Vaccinii Vitis-Idaeae (Ericaceae), Stripsenjoch in Tirolia.

3. **Aulographum Myrtaceae** Theiss., Ann. Mycol. 16., 1918, p. 187. — Epiphyllum. Maculis nigris opacis, crustas circulares 3-6 mm. latas efformantibus; hyphis superficialibus, brunneis septatis ramosis 5 μ cr. tunica crassa praeditis; hyphopodiis variabilibus, e cylindraceis rectis usque incurvatis et sublobatis, 5 μ latis 8 μ altis, v. breviter capitatis et 5-6 μ diam.; perithecciis linearibus, rectis v. curvis, superficialibus 180-240 × 35-50 rimoso-apertis, radiantibus; ascis paraphysatis, ellipsoideis, breviter pedicellatis, 24-28 × 14-16, octosporis, crasse tunicatis; sporidiis hyalinis, bilocularibus, 8-10 μ long., loculo super. 3-4 μ cr. inf. 2-3 μ, fortiter incurvatis; para- 4780

physibus indistinctis.

Hab. in foliis Campomanesiae sp. (Myrtaceae), S. Leopoldo, Rio Grande do Sul, Brasilia (THEISSEN).

4. **Aulographum fimbriatum** Sacc., Notae Myc. XXIII p. 68 (Acc. Veneto- 4781
trent. 1917). — Peritheciis hinc inde dense irregulariter gregariis et maculas atras, varias formantibus, superficialibus, applanatis, oblongis, 200-300 × 50-60, rima latiuscula percursis; contextu ex cellulis angustis subparallelis, radiantibus formato, fuligineo, basi zona eximie fimbriata pallidiore marginato; ascis cylindraceis brevibus, 25-30 × 6,5-7,5, sessilibus, apice rotundatis, crasseque tunicatis, 4-8-sporis, filiformi-paraphysatis; sporidiis subdistichis oblongis, utrinque obtusulis, 7-8 × 2-3, hyalinis, lenissime constrictis.

Hab. in rhachidibus emortuis Demonoropis (Palmae), in M. Maquiling, ins. Philipp. — Affine *A. Donacis* Niessl et *A. atromaculanti* P. et S. sed peritheciis basi fimbriatis et non stellatim dispositis, ascis angustioribus etc. distinguitur.

CAUDELLA Syd., Ann. Mycol., 14., 1916, p. 90 (Etym. *cauda* ob sporidia caudata). — Mycelium superficiale, repens, septatum, ramosum, hyphopodiatum. Thyriothecia dimidiato-scutata, inversa, radiato-contexta vel melius ex hyphis maeandrice curvatis contexta, centro poro pertusa. Asci clavato-cylindracei, paraphysibus geminis nullis. Sporidia didyma, hyalina, basi longe caudata vel potius ciliata.

1. **Caudella oligotricha** Syd., l. c. — Hypophylla, plagulas indefinitas 4782
mediocres vel majusculas plus minus effusas usque 2 cm. longas laxas formans; mycelio laxissimo et parco, ex hyphis rectis vel subrectis fuscis 3,5-5 μ crassis remote septatis saepe plus minus rectangulariter ramosis composito; hyphopodiis sparsis, alternantibus, continuis, sessilibus, globosis, subglobosis vel ovatis, rarius crasse cylindraceis, integris, obtusis, 7-11 μ longis, 6-9 μ latis; thyriotheciis laxe gregariis, orbicularibus, atris, 300-380 μ diam., centro poro rotundo 25-30 μ lato pertusis, lenticularibus, inversis, contextu fusco ex hyphis undulatis vel fere maeandrice curvatis ad marginem tenuibus 2-3 μ latis centrum versus magis regularibus crassioribus (3-4 μ) et distinctius septatis (articulis 4-6 μ longis) composito; ascis cylindraceo-clavatis, apice rotundatis et crasse tunicatis, basi breviter stipitatis, 85-105 × 16-18, octosporis, in massa mucosa (ex paraphysibus mucose diffluentibus constante?) sitis; sporidiis oblique monostichis, vel distichis, subfusoideis vel auguste cylindraceo-clavatis, supra medium septatis, non vel vix con-

strictis, hyalinis, apice rotundatis, deorsum sensim attenuatis, basi longissime angustissimeque caudatis v. potius ciliatis, 25-34 × 6-7 (sine cilio), cilio hyalino recto v. curvato, 25 × 1.

Hab. in foliis Flacourtiaceae sp., Seringal S. Francisco, Rio Acre, Brasilia (E. Ule). — Sporidiis caudatis a ceteris Microthyriaceis bene distinctum genus.

CALOTHYRIUM Theiss., Ann. Mycol. X, 1912, p. 160; Broteria 1914, p. 82. — Theiss. et Syd., Ann. Mycol. XV, 1917, p. 418. — Mycelium distinctum superficiale exhyphopodiatum. Thyriothecia radiata depressa centro ostiolata. Hymenium simplex, polyascum. Asci crasse cylindracei paraphysati quandoque distincte. Sporidia hyalodidyma. — Typ. gen. *C. nebulosum* (Speg.) Th., *C. pinastri* (Fuck.) Th. etc.

1. **Calothyrium jodascum** Spegaz., Rel. Mycol. trop. etc. in Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 139. — Epiphyllum; maculae nullae; subiculum laxissime reticulato-araneosum, hyphis gracilibus 4-7 μ, fuligineis modice septulatis alterne ramosis, hyphopodiis plane destitutis sed conidiis alternariiformibus (40-45 μ long.) conspersis efformatum; thyriothecia reticulo subiculari insidentia, laxe gregaria, scutato-hemisphaerica, 100-150 μ, astoma, atra glabra laevia opaca, serius stellatim dehiscentia, margine denticulato-fimbriata, coriacella, contextu prosenchymatico-radiante rectiusculo gracili crebriuscule septulato donata; asci obovati superne obtuse rotundati breviter minuteque pedicellati, aparaphysati tunica leniter violascente vestiti, 8-spori; sporae obovato-ellipticae, utrinque rotundatae, parum supra medium 1-septatae, non v. vix constrictae, loculo supero breviore latioreque, e globoso ovato, infero subobconoideo, leves, hyalinae, 20-30 × 15-16. 4783

Hab. ad folia coriacea viva plantae ignotae, prope Apiahy, Brasilia (J. Puiggari).

2. **Calothyrium leptosporum** Theiss., Broteria, Bot., v. XII, 1914, fasc. I, p. 21. — Sori epiphylli orbiculares minuti 2-3 mm. lati; thyriothecia in singulis soris dense gregaria, superficialia, inversa, 100-150 μ diam., applanata, radiato-contexta ex hyphis flexuoso-undulatis fuscis angustis 2,5 μ cr., ambitu integro, centro parenchymatico demum rupto aperta. Mycelium laxum, ex hyphis angustis, flaccidis, griseo-fuscis, laxe ramosis septatisque, 2,5 μ cr. formatum; hyphae imprimis ad superficiem thyriothecii binis v. ternis parallele junctis faveolos latiusculos efformant, ad marginem 4784

excurrentes. Asci breviter cylindracei, octospori, supra rotundati, 55 × 14, paraphysibus tenuibus flaccidis. Sporidiis distichis hyalinis, 10-12 × 3,5-4, cellula superiore paullum breviore et latiore, cellula infer. longiore cylindracea.

Hab. in foliis S o l a n i sp., São Leopoldo, Brasilia. — Socia *Asterina subreticulata* Speg. et *Phaeodimeriella guarapiensis* (Speg.) Th.

3. **Calothyrium subcolliculosum** Spegaz., Rel. Mycol. trop. etc. in Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 140. — Epiphyllum; maculae nullae; subiculum submembranaceum plagulas orbiculares 5-10 mm. diam. atras, centro pallidiores, majusculas matrici arcte adnatas efficiens, hyphis gracilibus, clathrato-reticulatis fuligineis hyphopodiis destitutis efformatum; thyriothecia in plagulis subcircinatim circa centrum pallidius laxe gregaria, parva, 150-250 μ diam., scutato-depressa, astoma, stellatim dehiscentia, margine minute crenato-denticulata, contextu pellucido et perspicuo; asci elongato-obovati obtusissime rotundati, deorsum-subcuneati ac in pedicello brevissimo crassoque producti, tunica dilute violascente vestiti, dense crasseque pseudoparaphysati, 8-spori, 80-100 × 30-40; sporae obovato-clavulatae, medio 1-septato-constrictulae, loculo supero globoso v. subovato obtuso, infero obconico acutiusculo donatae, hyalinae, laeves, 30-32 × 15-16. 4785

Hab. ad folia viva coriacea plantae ignotae (? Rubiaceae), prope Apiahy, Brasilia (J. Puiggari).

LEMBOSIOPSIS Theiss., Ann. Mycol. XI, 1913, p. 435; Theiss. et Syd., Ann. Mycol. XV, 1917, p. 422. — Est *Lembosia* sporidiis hyalodidymis praedita. — Typus gen. *Lemb. Andromedae* (Tracy et Earle) Theiss. 4786

*) **ASTERELLA** Sacc. — Syll. I p. 42, IX p. 393, XI p. 256, XIV p. 698, XVI p. 649, XVII p. 882, XXII p. 535.

1. **Asterella Puttemansii** P. Henn., Hedw. vol. 48 (1908) p. 11. — Maculis mycelii epiphyllis, rotundatis vel effusis, atro-crustaceis, hyphis repentibus, ramosis, fuscis, 4-5 μ crassis; peritheciis sparsis vel aggregatis, dimidiato-scutatis, radiato-cellulosis, atris, 140-200 μ diam.; ascis ovoideis, tunicatis, octosporis, 50-55 × 23-25; sporidiis subdistichis vel conglobatis, ellipsoideis, medio valde constrictis, 4787

*) Typ. gen.: *A. megalospora* B. et C., sec. Theiss. et Syd. l. c. sporidiis brunneis donata et tunc ad gen. *Asterinam* pertinet.

mox dehiscentibus, 20-22 × 10-12, cellulis subglobosis, hyalinis, 10-12 μ diam.

Hab. in foliis Myrtaceae, Rio Grande, S. Paulo, Brasilia.

2. **Asterella? fumaginea** Dearn. et Barth., Mycologia IX, 1917 p. 349.— 4788
Peritheciis epiphyllis, gregariis v. folium fere totum subiculo fumagineo occupantibus; mycelio ex hyphis dichotomicis, anastomoticis brunneis septatis, 5-6 μ cr.; peritheciis globosis, setis 1-3 pungentibus, atro-brunneis, 100-400 × 4-9, coronatis, rugulosis, atro-brunneis, 300-500 μ diam.; ascis sessilibus v. breviter ellipsoideis v. piriformibus, 45-60 × 25-30, membrana 3 μ cr. praeditis, in quoque perithecio paucis, usque ad 10; sporidiis hyalinis clavato-oblongis, grumoso-nucleatis, 1-septatis, magnitudine variis, 15-25 × 8-12, cellula sup. latiore.

Hab. in foliis vivis Panici ? latifolii (Graminaceae), Maricoa, Porto Rico (F. L. Stevens). — Vix hujus loci.

CALOTHYRIOLUM Spegaz., Rel. Mycol. trop. etc., in Bol. Ac. Nac. Cienc. Cordoba t. 23., 1919, Extr. p. 137. — Caracteres ex tabula synoptica p. 435 relata.

1. **Calothyriolum apiahynum** Spegaz. l. c. Extr. p. 141. — Amphigenum; 4789
maculae nullae; subiculum plagulas orbiculares subparvas 2-5 mm. diam., atras efficiens ex hyphis laxissime intertextis rectiusculis remotiuscule septulatis alterne ramosis, 5-9 μ cr., nodulis hyphopodiisque omnino destitutis fuligineis efformatum; thyriothecia in centro plagularum subiculi pauci-gregaria, pusilla, 90-100 μ diam. astoma, serius late stellato-fissa, atra, glabra, laevia, opaca, contextu radiante rectiusculo crebre septulato, ambitu parce fimbriata; asci e globoso subobovati, antice obtusissime rotundati crassissimeque tunicati, postice brevissime crasseque pedicellati, aparaphysati, octospori, 40 × 35; sporae ellipsoideae v. vix subobovatae, medio 1-septato-constrictae, hyalinae, 20 × 9.

Hab. ad folia viva coriacea Lauraceae (? Persea), prope Apiahy, Brasilia (J. Puiggari).

MICROTHYRIOLUM Spegaz., Rel. Mycol. trop. etc. in Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 136. — Caracteres ex tabula synoptica p. 435 relata.

1. **Microthyriolum apiahynum** Spegaz., Rel. Mycol. Trop. etc. in Bol. Ac. 4790
Nac. Cordoba, t. 23., 1919, p. 135. — Epiphyllum; maculae orbiculares determinatae parvae, 1-2 mm., fuscescentes; thyriothecia pu-

silla 100-150 μ constipata in maculis saepius circinantia, astoma, serius centro stellatim dehiscentia, coriacella, ambitu non fimbriata vix denticulata, atra, contextu aegre perspicuo radiante recto crebre transverse septato, subiculo omnino destituto; asci obovati antice obtusissime crasseque tunicati, postice subcuneati, brevissime crasseque pedicellati, pseudoparaphysibus paucis crassis concomitati, 8-spori, 50 × 30; sporae elliptico-obovatae v. subclavulatae, medio 1-septatae non v. vix constrictae, loculis subaequilongis, supero elliptico-ovato obtuso, infero obconico acutiuscule rotundato, hyalinae postremo chlorinae.

Hab. in foliis coriaceis vivis Lauraceae (? Persea), prope Apiahy, Brasilia (J. Puiggari).

2. **Microthyriolum? oligosporum** Spegaz., Rel. Myc. trop. etc. in Bol. Ac. Nac. Cienc. Cordoba t. 23.. 1919, Extr. p. 137. — Epiphyllum; maculae nullae; thyriothecia hinc inde dense gregaria (5-20), astoma 150-200 μ diam., serius stellatim dehiscentia, atra rugulosa glabra coriacella, contextu prosenchymatico-radiante non v. vix flexuosulo remote septulato, ambitu parce denticulato-fimbriata; asci e globoso obovati, antice obtusissime rotundati crassissimeque tunicati, postice subcuneati brevissime noduloseque pedicellati, tunica semper hyalina, aparaphysati, saepius tetraspori, 50-60 × 40; sporae conglobatae, cilindraceo-ellipticae, non v. vix subclavulatae, utrinque obtuse rotundatae, medio 1-septatae non v. vix constrictae, hyalinae, per aetatem leniter chlorinulae, 30 × 12-15. 4791

Hab. in foliis vivis subcoriaceis ignotis (? Solanaceae), prope Apiahy, Brasilia (J. Puiggari).

Sect. 3. Phaeosporae

*) **ASTERONIA** Sacc. — Syll. I p. 47, XIV p. 693.

1. **Asteronia Lauraceae** P. Henn., Hedw. vol. 48 (1908) p. 11. — Maculis mycelii hypophyllis, gregariis, rotundatis, atro-crustaceis; perithecciis aggregatis, globulosis, cellulosis, 150-180 μ diam., ascis clavatis, apice rotundatis, octosporis, 30-35 × 4-6, paraphysatis; sporidiis subdistichis, oblongis, subfusoideis vel clavatis, obtusis, brunneo-fuscis, 6-10 × 2-3; hyphis repentibus, radiantibus, ramosis, fuscis, 2-3 μ crassis. 4792

Hab. in foliis Lauraceae, Lontra, Rio Feio, S. Paulo, Brasilia.

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*) Typ. gen. *A. erysiphoides* K. et C. nec non *A. appendiculosa* (M. et B.) Mont., sec. Theiss. et Syd. l. c. sunt fungi conidiferi.

Sect. 4. Phaeodidymae

ASTERINA Lév. — Syll. I p. 39, IX p. 379, XI p. 255, XIV p. 693, XVI p. 646, XVII p. 875, XXII p. 537.

1. **Asterina tertia** Rac. ap. Theiss., Gattung Asterina (1913) p. 103.— 4793
Mycelio amphigeno indeterminato, atro, plagulas 1-3 mm. latas saepe confluentes efformante; hyphis obscure brunneis, 4 μ cr., septatis, cellulis elongatis, ramosis sed non valde intricatis; hyphopodiis sparsis, continuis, 3-4-lobatis, 8-13 μ latis, 5-8 μ altis; pycnidiis et peritheciis conformibus, conoideo-applanatis, margine breviter nec semper fimbriatis, radiato-contextis, initio clausis dein centro laciniatim dehiscentibus; pycnidiis 55-80 μ latis, conidiis continuis, ovatis, levibus, brunneis, 17-20 × 12-15; peritheciis 120-160 μ diam.; ascis aparaphysatis, octosporis, 40-48 × 20-23; sporidiis didymis, brunneis, levibus, 16-20 × 8-10, ovoideis, medio leviter constrictis, utrinque rotundatis, lóculo inferiore angustiore.

Hab. in foliis Acanthacearum (Adhatoda, Crossandra, etc.), Buitenzorg, Java.— Affinis *A. Lawsoniae* sed conidiis omnino brunneis, annulo aequatoriali hyalino carentibus. — Videtur mera forma *A. diplocarpae.*

2. **Asterina melanomera** Syd., Ann. Mycol. XV, 1917, p. 241. — Pla- 4794
gulas plerumque epiphyllas 0,5-1,5 cm. latas irregulares formans; mycelium ex hyphis obscure brunneis rectangulariter ramosis 6-8 μ crassis septatis compositum; hyphopodia dispersa, solitaria continua crassa, obtusa, 11-14 μ alta, 10-11 μ lata. thyriothecia aequaliter densiusculeque disposita, orbicularia, convexa, 180-240 μ diam., radiatim contexta, ambitu fimbriata, contextu atro opaco; asci ovati vel ovato-globosi, 35-50 × 30-40, 4-8-spori, ut videtur aparaphysati; sporae ellipsoideae utrinque rotundatae, medio septatae et valde constrictae, leves, obscurae vel atro-brunneae, 25-30 × 12-14.

Hab. in foliis Dasymaschali clusiflori (Anonaceae), pr. Paete, Laguna, Ins. Philipp. (C. F. Baker).

3. **Asterina saginata** Syd., Ann. Mycol. XV, 1917, p. 241. — Plagulas 4795
epiphyllas 4-8 cm. diam. atras formans; mycelium matrici adpressum ex hyphis longiusculis plus minus distincte et copiose rectangulariter ramosis radiantibus obscure castaneo-brunneis 8-10 μ latis septatis (articulis 18-25 μ longis) compositum; hyphopodia haud numerosa alternantia, raro opposita sessilia, ovata, integra, 13-16 μ longa 10-11 μ lata; thyriothecia laxe aggregata, orbicularia vel

suborbicularia, 200-300 μ diam., aterrima, opaca radiatim ex hyphis crassis contexta, ad ambitum hyphis longis (usque 80 μ) 7-10 μ latis copiose fimbriata, asci globosi vel subglobosi ca. 45 50 μ diam., aparaphysati; sporae ellipsoideo-oblongae, medio septatae et constrictae obscure brunneae, 27-30 × 12-14.

Hab. in foliis Polyalthiae spec. (Anonaceae), Bataan, Luzon, Ins. Philipp. (M. Ramos).

4. **Asterina porriginosa** Syd. in Leaflets of Philipp. Bot. V (1912) p. 1541. — Mycelio epiphyllo, plagulas minutas vel mediocres rotundatas subinde confluentes 1-5 mm. latas, atras, tenues efformante, ex hyphis fuscis ramosis 5-6 μ cr. composito; hyphopodiis alternantibus, sparsis, sessilibus, 1-cellularibus, cylindraceis vel subclavatis, apice rotundatis, 12-16 × 3,5-6; peritheciis rotundatis, radiatim contextis, stellatim dehiscentibus, 160-220 μ diam., contextu opaco, ambitu hyphis radiantibus 3-4 μ crassis cinctis; ascis ovato-globosis, 40-54 × 30-45, octosporis; sporidiis ellipsoideis, utrinque rotundatis, medio 1-septatis et leniter constrictis, ex hyalino brunneis, verrucosis, 22-32 × 11-16, loculo superiore subinde paullo majore. 4796

Hab. in foliis vetustis Ilicis cymosae (Aquifoliaceae), Puerto Princesa, Palawan, ins. Philipp.

5. **Asterina malabarensis** Syd. in Syd. et Butl., Ann. Mycol. IX, 1911, p. 391. — Peritheciis hypophyllis, maculas irregulares 1 cm. longas efficientibus, irregularibus, mox rotundatis, mox autem elongatis v. forma irregulari, sublembosioideis, subinde confluentibus, 150-250 μ diam. v. usque 400 μ long., ambitu fibrillis radiantibus praeditis, contextu opaco, irregulariter dehiscentibus; mycelio parce v. modice evoluto, ramoso, ex hyphis obscure brunneis 4,5-6 μ diam. composito, hyphopodia pauca erecta usque 15 μ longa gerente; ascis ovatis v. ovato-clavatis, octosporis, apice leniter incrassatis, 45-58 × 25-35; sporidiis oblongis, utrinque rotundatis, medio 1-septatis et constrictis, levibus, primo hyalinis, mox brunneis, 22-26 × 11-13. 4797

Hab. in foliis Pothi scandentis (Araceae), Kanouth, Malabar, Indiae or. (E. J. Butler).

6. **Asterina travancorensis** Sydow, Ann. Mycol. XIII, 1915, p. 38. — Epiphylla, plagulas minutas orbiculares 1-2 mm. diam. formans; mycelio ex hyphis rectis vel fere laxe ramosis septatis (articulis 20-30 μ longis) castaneo-brunneis 4-6 μ crassis composito; hyphopodiis modice numerosis, alternantibus, 12-18 μ longis, 8-11 μ latis, cellula superiore varie grosseque lobata vel incisa, inferiore brevi; 4798

thyriotheciis crebre dispositis, rotundatis, 130-160 μ diam., stellatim dehiscentibus, ex hyphis rufo-vel castaneo-brunneis subrectis ambitum versus dichotome ramosis 3-4 μ crassis crebre septatis (articulis 4-8 μ longis) compositis, strato basali praeditis; ascis ovato-globosis, aparaphysatis, 26-35 × 22-28, octosporis; sporidiis ellipsoideo-oblongis, minute verrucosis, utrinque rotundatis, ad septum modice constrictis, fuscis, 18-22 × 9-11, loculis fere aequalibus vel superiore parum majore.

Hab. in foliis Marsdeniae sp. (Asclepiadaceae), Pulliyanur, Travancore, Indiae or. (E. J. Butler).

7. **Asterina Nycticali** H. S. Yates, Philipp. Journ. Sc. XII (1917) p. 371 (*A. Nycticaliae*). — Maculis plerumque epiphyllis, orbicularibus vel irregularibus, atris, 3-5 mm. diam., mycelio ex hyphis paucis septatis obscure brunneis composito, ramis plerumque oppositis, anastomosantibus, 5-6 μ latis; hyphopodiis numerosis, plerumque alternantibus vel irregularibus, dichotomo-lobatis, 10-11 × 12-15, 1-cellularibus; peritheciis numerosis, rotundatis applanatis, minutis, 90-110 μ diam., obscure brunneis, subopacis, stellatim dehiscentibus; contextu radiante ex hyphis septatis 4-5 μ latis composito; ascis ovatis vel subglobosis, 26-28 × 18-20, octosporis, paraphysatis; sporidiis oblongis, utrinque rotundatis, medio 1-septatis, constrictis, brunneis, levibus, 15-18 × 7-8. 4799

Hab. in foliis Nycticali cuspidati (Bignoniaceae), Basiad, Taybas, Luzon, Ins. Philipp.

8. **Asterina fallaciosa** Syd., Ann. Mycol. XV, 1917, p. 240. — Epiphylla, plagulas primitus orbiculares vel suborbiculares 3-5 mm. diam. mox irregulares et plus minus confluentes tandem saepe effusas formans; mycelium rectangulariter ramosum, ex hyphis rectis obscure castaneo-brunneis 5,5 8 μ crassis laxiuscule ramosis compositum, hyphopodia haud numerosa solitaria vel saepe perfecte opposita, irregulariter cylindracea vel plerumque ampulluliformia, 12-17 μ longa, basi 9-10 μ lata continua; thyriothecia plerumque densiuscule disposita, rotundata vel elliptica aut oblonga, 220-320 μ diam. vel usque 400 μ longa et 200 μ lata, ex hyphis radiantibus, rectis copiose septatis obscure castaneo-brunneis 4-5 μ crassis copiose septatis (articulis centralibus 4-5 × 6, peripheriam versus longioribus usque 16 μ) composita, ambitu hyphis similibus fimbriata; asci globoso-ovati, aparaphysati, 50-60 × 40-50, octospori; sporae ellipsoideo-oblongae, utrinque rotundatae, medio vel circa medium septatae et vix vel leniter constrictae, fuscae, leves, 32-36 × 17-19. 4800

Hab. in foliis Canarii sp. (Burseraceae), S. Antonio, Laguna, Ins. Philipp. (M. Ramos). — Habitus fere *Asterinellae obesae*, sed hyphae hyphopodiatae.

9. **Asterina Capparidis** Syd. et Butl., Ann. Mycol. IX, 1911, p. 390.— 4801
Mycelio plerumque epiphyllo, maculas rotundatas dein confluentes et crustas atras efficiente, ex hyphis repentibus intricato-ramosis anastomosantibus brunneis 3-4 μ cr. composito; hyphopodiis alternantibus, capitatis, superne sublobatis; peritheciis dense stipatis, lenticularibus, radiatim contextis, 90-120 μ diam., stellatim dehiscentibus; ascis ovoideis v. ovato-globosis, octosporis, 28-33 × 20-26; paraphysibus sparsis, septatis, ramosis; sporidiis conglobatis, ellipsoideis, utrinque rotundatis, primo hyalinis, dein brunneis, 1-septatis, loculo superiore majore, 16-19 × 8-10, episporio subtiliter granulato.

Hab. in foliis Capparidis sp. (Capparidaceae), Madras, Indiae Or. (E. J. Butler). — *Ast. sphaerascae* Thüm. affinis sed ascis ovoideis octosporis diversa.

10. **Asterina papillata** Syd., Ann. Mycol. XIV, 1916, p. 92. — Amphi- 4802
gena, plagulas primitus minutas dein confluentes irregulares effusas griseolas formans; mycelio laxo ex hyphis fuscis 4-5,5 μ crassis remote septatis rectis composito; hyphopodiis haud numerosis alternantibus rectis vel subrectis, cylindraceis, 14-17 μ longis, 4-5,5 μ latis, cellula basali brevi, haud lobatis; thyriotheciis laxe gregariis, rotundatis 140-200 μ diam., stellatim dehiscentibus, demum late apertis, non vel parum fimbriatis, ex hyphis rectis obscure castaneo-brunneis subopacis crebre septatis (articulis 5-7 × 4-5) compositis, membrana basali praesente; ascis globosis usque ovatis, aparaphysatis, 38-48 × 35-42, octosporis; sporidiis ellipsoideis, grosse verrucosis, opace brunneis, medio constrictis, 24-28 × 12-13.

Hab. in foliis Capparidis sp. (Capparidaceae), Seringal Auristella Rio Acre, Peruvia (E. Ule).

11. **Asterina Caricarum** Rehm — Syll. XIV p. 695 — var. **microspora** Theiss., 4803
Gatt. Asterina (1913) p. 96. — A typo differt sporidiis minoribus, 17-22 × 8-11, hyphis plerumque rectis non undulatis. — Adsunt conidia (*Asterostomellae*) ellipsoidea, 13-19 × 8, medio hyalino-cincta.

Hab. in foliis Caricae Papayae, C. sp. (Caricaceae) et Loasaceae cujusdam, in Brasilia, ex speciminibus Uleanis.

12. **Asterina Jacaratiae** Theiss., Ann. Mycol. XIV, 1916, p. 269. — Co- 4804
loniis epiphyllis, tenuibus, sparsis v. approximatis, suborbicularibus, 1-2 mm. latis; hyphis opposito-ramosis et pluries reticulato-con-

nexis, lacte brunneis, 4 μ cr.; hyphopodiis oppositis v. rarius unifariis, 11-14 × 8-10, stipitatis, bicellularibus, cellula basilari cylindracea, apicali capitata; peritheciis 100-140 μ diam., plano convexulis, centro papillatis, demum stellatim apertis, contextu inverse radiato, ex fibrillis 3-3,5 μ cr., laete brunneis formato; ascis aparaphysatis, 45 × 32, octosporis; sporidiis bilocularibus, profunde constrictis, 17-20 × 9-10, brunneis, articulis subglobosis. Conidiis ovato oblongis, brunneis, 18 × 8-9, zona aequatoriali pallidiori.

Hab. in foliis Jacaratiae dodecaphyllae (Caricaceae), in Brasilia merid. (Ule). — Affinis *Asterinae Caricarum* var. *microsporae.*

13. **Asterina Lophopetali** Rehm, Ascomyc. Philipp. V; Leaflets of Phi- 4805
lipp. Botany, VI (1914) p. 2228. — Plagulis epiphyllis, nigritulis, discoidalibus, 0,5-1 cm. latis, sparsis; hyphis mycelii parce ramosis, 6 μ circ. latis, septatis, fuscis; hyphopodiis clavatis, rectis, interdum subcurvatis, fuscis, 2-cellularibus, 12-15 μ altis, cellula superiore 6-8 μ lata, inferiore 5-6 μ; peritheciis in mycelio sparsis, dimidiato-scutatis, primitus orbicularibus, mox linearibus, rectis, 300 μ longis, 100 μ latis, irregulariter ad apicem mox rimose apertis, fuscis, prosenchymatice centrifuge contextis, ad basim hyphis 4-6 μ cr. septatis longe excurrentibus ornatis; ascis ovoideis, aparaphysatis, J-, 40-50 × 20-25; sporidiis oblongo-clavatis, medio vel paullulum superius septatis, subconstrictis, obscure fuscis, levibus, 25-30 × 11-15.

Hab. in foliis Lophopetali toxici (Celastraceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (S. A. Reyes).

14. **Asterina brasiliana** Spegaz., Rel. Myc. trop. etc. in Bol. Ac. Nac. 4806
Cienc. Cordoba, t. 23., 1919, Extr. p. 142. — Ita vocanda *Ast. Combreti* Syd. var. *brasiliensis* Thsz. quia secund. Cl. Spegazzini, minime varietas vero ut genuina species habenda.

15. **Asterina escharoides** Syd., Enum. Philipp. Fungi II, in Philipp. 4807
Journ. of Sci. VIII (1913) p. 489. — Epiphylla, maculas minutas 1-4 mm. latas efficiens; mycelio parco, ex hyphis anastomosantibus, remote septatis, fuscis, levibus, 3,5-5,5 μ crassis composito; hyphopodiis paucis, irregularibus, bicellularibus, cellula basali plerumque breviter cylindracea, superiore multo latiore, parum lobata et 8-10 μ lata, totis 12-18 μ longis; peritheciis aggregatis, rotundatis, 130-170 μ diam., stellatim dehiscentibus, contextu ex hyphis rectis fuscis 2,5-3 μ latis radiatim composito; ascis globosis vel subglobosis, aparaphysatis, 26-40 × 24-32, octosporis; sporidiis ob-

longis, utrinque rotundatis, medio 1-septatis et leniter constrictis, primitus hyalinis dein brunneis in maturitate minute verruculosis, 17-22 × 8-12.

Hab. in foliis vivis Quisqualis indicae (Combretaceae), Luzon, Manila, ins. Philipp. (MERRILL).

16. **Asterina perpusilla** Syd., Ann. Mycol., XIV 1916, p. 366. — Amphigena, praecipue epiphylla, nudo oculo non vel vix conspicua; mycelio parcissimo, nudo oculo vel etiam sub lente valida non conspicuo, solum sub microscopio visibili; laxissimo, ex hyphis paucis anastomosantibus olivaceo-brunneis leniter undulato-flexuosis remote septatis 2-3,5 μ crassis formato; hyphopodiis paucis, hinc inde solitariis, sessilibus, continuis, valde lobatis, plerumque latioribus (6-8 μ) quam altioribus (4-6 μ); thyriotheciis sparsis, ambitu orbicularibus, 70-160 μ diam., e strato simplici hypharum 2-3 μ crassarum olivacearum vel olivaceo-brunnearum undulato-flexuosarum vix septatarum (vel saltem septis vix conspicuis) radiatim compositis, ad marginem saepe hyphis aequalibus plus minus longis fimbriatis, strato basali nullo, mox late apertis; ascis ovatis vel ovato-globosis, aparaphysatis, 25-30 × 20-22, 4-8-sporis; sporidiis oblongis, utrinque rotundatis, medio vel circa medium septatis et parum constrictis, ex hyalino brunneis, levibus, 18-20 × 9-11; conidiis in thyriotheciis similibus sed minoribus evolutis, continuis, late ovatis vel ovato-globosis, atro-brunneis, 18-22 × 12-16. 4808

Hab. in foliis Alangii begoniaefolii (Cornaceae), Los Baños, ins. Philipp. (C. F. BAKER).

17. **Asterina simillima** Syd., Ann. Mycol. XV, 1917, p. 242. — Epiphylla, plagulas minutas 1-2 mm. latas tenues formans; mycelium laxum, tenuiter expansum, ex hyphis gracilibus flexuoso-undulatis 3-4,5 μ crassis flavo-brunneis parce septatis ramosis alternantibusque compositum; hyphopodia alterna, sessilia, continua, varie lobata, 5-10 μ longa et alta; thyriothecia minuta, dense gregaria, 80-115 μ diam., applanate stellatim dehiscentia, mox late aperta, strato singulo ex hyphis rectis opace olivaceo-brunneis vel atro-olivaceis, 2-3,5 μ crassis (cellulis 4-7 μ longis) contexto, ambitu copiose fimbriata, membrana basali nulla; asci ovato-globosi, aparaphysati, 25-30 × 20-24, octospori; sporae oblongae, brunneae, utrinque rotundatae, medio septatae, vix vel leniter constrictae, leves, 14-17 × 6-7,5. 4809

Hab. in foliis Luffae cylindricae (Cucurbitaceae), Rizal, Ins. Philipp. (M. RAMOS).

18. **Asterina Momordicae** H. S. Yates, The Philipp. Journ. of Sc., Bot., 4810
13., 1918, p. 374. — Epiphylla ; maculas 2-4 mm. latas, atras efficiens ; mycelio ex hyphis remote septatis fuscis 5-6 μ crassis composito ; hyphopodiis numerosis, irregularibus, unicellularibus, 8-12 μ longis, lobatis ; peritheciis rotundatis, 80-90 μ diam., stellatim dehiscentibus ; contextu ex hyphis rectis brunneis radiatis, 2,5-3 μ latis composito ; ascis subglobosis, 35-40 × 22-24, octosporis, paraphysatis ; sporidiis oblongis, utrinque rotundatis, medio 1-septatis et constrictis, brunneis, laevibus, 19-21 × 9-11 ; cellula superiore latiore.

Hab. in foliis Momordicae sp. (Cucurbitaceae), Mount Binnang, Prov. Taybas, Luzon, Ins. Philipp. (Ramos et Edaño).

19. **Asterina tropicalis** Spegaz., Fungi Costaric. nonn. in Bol. Ac. Nac. 4811
Cienc. Cordoba, t. 23., 1919, Extr. p. 211. — Maculae nullae ; subiculum atrum tenuissimum laxissime araneosum alterne v. opposite ramulosum, hyphopodiis pediformibus, 10 × 15, sessilibus alternis ornatum ; thyriothecia laxe gregaria minuta rigidula, membrana basali destituta, astoma, centro radiatim rimosa, margine fimbriatula, atra, contextu fibroso-radiante parum distincto, 120-150 μ diam. ; asci obovati, brevissime crasseque pedicellati, aparaphysati, 8-spori, 45-50 × 35 ; sporae obovato-subcylindraceae, utrinque obtusae, medio 1-septatae non v. vix constrictae, loculis subaequilongis v. infero leniter breviore, fuligineae, laeves, 24 × 12.

Hab. in foliis vivis Reediae dulcis (Cyperaceae), in cultis S. Josè Costarica, America trop.

20. **Asterina Dilleniae** Syd., Philipp. Journ. of Sc., Bot., IX, 1914, 4812
p. 181. — Epiphylla, plagulas orbiculares 2-5 mm. latas atro-griseas formans ; mycelio radiante, ex hyphis longiusculis ramosis obscure castaneo-brunneis regularibus remote septatis crasse tunicatis 7-9 μ latis composito ; hyphopodiis haud numerosis alternantibus vel unilateralibus, continuis, globulosis, truncatis vel breviter cylindraceis, castaneo-brunneis, rotundatis vel parum lobatis aut angulatis, 10-15 μ longis 9-11 μ latis ; peritheciis sparsis, planis, inversis, rotundatis, 140-200 μ diam., stellatim dehiscentibus contextu subatro opaco ex hyphis 4-5 μ crassis composito ; ascis globosis usque ovatis, paraphysatis, 40-60 × 35-45, octosporis, sporidiis conglobatis, oblongis, utrinque late rotundatis, medio 1-septatis et constrictis, ex haylino fuscis, verrucosis, 20-25 × 10-12.

Hab. in foliis Dilleniae sp. (Dilleniaceae), Palawan, Taytay, Ins. Philipp. (Merrill).

21. **Asterina Ramosii** H. S. Yates, The Philipp. Journ. of Sc., Bot. 13., 1918, p. 375. — Hypophylla; maculas suborbiculares, atro-griseas, 4-10 mm. diam. efformans; mycelio effuso, laxo, ex hyphis brunneis septatis ramosis 4-5 μ crassis composito; hyphopodiis paucis, alternantibus vel irregularibus, cylindraceis, globosis vel lobatis, 6-8 μ longis, 5 μ latis; peritheciis numerosis, rotundatis, 80-120 μ diam., subopacis, stellatim dehiscentibus, radiatim contextis; ex hyphis 4-5 μ latis composito; ascis ovatis, 18-20 × 15-17, octosporis, paraphysatis; sporidiis conglobatis, oblongis, subinde late rotundatis, medio 1-septatis, ad septa constrictis, laevibus, 14-16 × 6-8. 4813

Hab. in foliis Dilleniae sp. (Dilleniaceae), Catubig River, Samar, Ins. Philipp. (Ramos).

22. **Asterina hians** Syd., Ann. Mycol. XIV, 1916, p. 91. — Epiphylla; plagulas orbiculares 2-4 mm. diam. atras formans; mycelio radiante ex hyphis longis rectis vel subrectis remote septatis fuscidulis 5,5-7 μ latis ramosis composito; hyphopodiis alternantibus, continuis, sessilibus, ovatis vel crasse cylindraceis, obtusis, integris, modice numerosis, 12-15 μ longis, 7-8 μ latis; thyriotheciis gregariis, rotundatis vel ellipticis, 65-90 μ diam., mox latissime apertis ex hyphis opace viridulis vel griseo-viridulis rectis 4-5 μ latis (septis 7-12 μ distantibus) strato simplici radiato contextis, haud fimbriatis; ascis ovatis, 25-35 × 24-29, octosporis, aparaphysatis; sporidiis ellipsoideis, utrinque rotundatis, medio constrictis, ex hyalino opace viridulo-fuscis, levibus, 14-16 × 6-7. 4814

Hab. in foliis Dioscoreae (?), Seringal, Auristella, Rio Acre, Peruvia (E. Ule).

23. **Asterina Anisopterae** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 556. — Epiphylla, maculas parum definitas efformans; mycelio effuso, laxo, regulariter opposite ramoso, ex hyphis hinc inde anastomosantibus fuscis v. obscure fuscis 8-11 cr. (14-30 μ longis) nodos hemisphaerice prominulos 10-13 μ latos et altos gerentibus composito; thyriotheciis laxe gregariis, rotundatis, 200-300 μ diam. v. saepius ellipticis et tunc 250-500 μ longis 200-300 μ latis, leniter convexis, contextu ex hyphis fuscis v. subopacis rectis 6-8 μ crassis (articulis 10-12 μ longis) composito, ambitu hyphis brevibus radiantibus fimbriatis, sine membrana basilari; ascis aparaphysatis, ovato-globosis, 60-70 × 45-55; sporidiis ellipsoideis, utrinque rotundatis, medio v. infra medium septatis et constrictis, sordide brunneolis, levibus, 32-38 × 18-22. 4815

Hab. in foliis Anisopterae thuriferae (Dipterocarpa-

ceae), prov. Rhizal, Ins. Philippin. (M. Ramos).

24. **Asterina camarinensis** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 556. — Epiphylla, plagulas plus minus effusas 1-3 cm. (v. ultra) longas et latas formans; mycelio ex hyphis undulatis ramosis valde anastomosantibus obscure brunneis subopacis 7-9 μ cr. (articulis 20-30 μ longis) haud hyphopodiatis sed nodos gerentibus composito; nodis pro ratione numerosis, plano-hemisphaericis, parum prominulis, 9-11 μ crassis; thyriotheciis dense dispositis, semper ambitu rotundatis v. fere rotundatis, 350-450 μ diam., laxe et plane convexis, opacis, ex hyphis rectis 4-5 μ crassis compositis, ambitu mox parum mox magis fimbriatis, membrana basali nulla; ascis ovato-globosis v. ovatis, octosporis, aparaphysatis, 65-80 × 40-60; sporidiis ovato-ellipsoideis v. ovato-oblongis, plerumque infra medium septatis et parum constrictis, totis 38-43 × 20-26, loculo supero majore, infero parum minore et angustiore, dense minuteque verruculosis, brunneis. 4816

Hab. in foliis Parashoreae plicatae (Dipterocarpaceae), Mt. Isarog, Camarines, Ins. Philippin. (M. Ramos).

25. **Asterina shoreana** Sacc., Notae Myc. XXIII p. 61 (Accad. Ven. trent. 1917). — Epiphylla, late sed remotiuscule gregaria, maculas nebulosas formans; peritheciis dimidiatis, ratione majusculis, 240 μ diam., vertice demum stellatim rimosis, nigricantibus; contextu radiato ambitu in zonam pallidiorem 20 μ latam fimbriatam decurrente; mycelio tenuissimo e filamentis 6-7 μ cr. fuscis e peritheciis radiantibus, repentibus; ascis globoso-ellipsoideis, sessilibus, 55-60 μ diam., octosporis, aparaphysatis; sporidiis conglobatis, constricto-didymis, loculo superiore crassiore et obtusiore, 30-40 × 16, diu hyalinis, dein flavidis, demum brunneis. 4817

Hab. in foliis languidis v. emortuis Parashoreae plicatae (Dipterocarpaceae), Los Baños, ins. Philipp. — Affinis *Ast. inaequali* Mont. sed asci et sporidia paullo minora. Probabiliter potius gen. *Asterinellae* adscribenda et a praecedenti non satis distincta.

26. **Asterina japonica** Theiss., Gatt. Asterina, p. 43, tab. VI fig. 22-23 et VIII fig. 8, 13, 14 (1913). — Epiphylla; mycelio laxo, radiante; hyphis alterne ramosis, rectis, brunneis, 5 μ crassis; hyphopodiis alternis, continuis, hemisphaericis vel ovatis, obsolete lobatis, 5-8 × 8-12; peritheciis dense gregariis, orbicularibus, 140-200 μ diam. vel ellipticis usque ad 350 × 170, subcurvatis, poro centrali vel rima longitudinali dehiscentibus, ex hyphis 3-3,5 μ crassis, rectis, 4818

brunneolis opace contextis, aetate ad marginem hyphis rectis in mycelium excurrentibus; asci e globosis ovato-ellipsoideis, 45-68 × 25-30, octosporis, jodi ope lenissime coerulescentibus, paraphysibus mucose-indistinctis hyalinis obvallatis; sporidiis brunneis, 20-23 × 9-11, cellulis subinaequalibus utrinque rotundatis, constrictis.

Hab. in foliis Elaeagni pungentis (Elaeagnaceae), Tosa, Japonia.

27. **Asterina Elaeocarpi** Syd., Leafl. Philipp. Bot., IV, 1911, Art. 62., p. 1156. — Mycelio epiphyllo, maculas atras formante vel saepius totam folii superficiem irregulariter obtegente, atro, et hyphis dense breviterque ramosis 4-6 μ crassis hyphopodia alternantia 6-7 mero longa gerentibus composito; peritheciis dense sparsis, radiatim contextis, 100-180 μ diam., atris, centro perforatis; ascis ovatis, 42-60 × 28-35, octosporis; sporidiis conglobatis, ellipsoideis, utrinque rotundatis, medio 1-septatis et constrictis, et hyalino fuscis, 26-30 × 10-13. 4819

Hab. in foliis Elaeocarpi pendulae (Elaeocarpaceae), Todaya, Ms. Apo, Distr. Davao, ins. Mindanao, in Philipp. (Elmer).

28. **Asterina Breyniae** Syd., Ann. Mycol. XV, 1917, p. 242. — Epiphylla, plagulas minutas 1-3 mm. latas formans; mycelium ex hyphis rectiusculis obscure brunneis septatis ramosis 5-7 μ latis compositum; hyphopodia modice copiosa bicellularia, 12-15 μ alta, cellula inferiore breviter cylindracea, superiore multo crassiore, 10-12 μ lata, valde profundeque lobata vel incisa; thyriothecia aggregata, orbicularia, 150-250 μ diam., contextu olivaceo-brunneo opaco ex hyphis rectis 3-4 μ crassis radiatim composito, stellatim dehiscentia, ambitu plus minus fimbriata; asci ovato-globosi, aparaphysati, 45-55 × 30-38, octospori; sporidia ellipsoideo-oblonga, medio septata et constricta, utrinque rotundata, in maturitate verrucosa, brunnea, 21-25 × 10-11. 4820

Hab. in foliis Breyniae cernuae (Euphorbiaceae), Bontoc, Luzon, Ins. Philipp. (H. S. Yates).

29. **Asterina breyniaecola** A. Trotter n. nov., *Ast. Breyniae* H. S. Yates, Philipp. Journ. Sc. Manila, XII (1917) p. 370, nec Sydow. — Epiphylla, maculas orbiculares vel irregulares efformans, atras, 1-3 mm. diam., vel confluentes et plus minus totam folii superficiem obtegentes; mycelio ex hyphis ramosis anastomosantibus obscure brunneis septatis 4-5 μ crassis composito; hyphopodiis paucis, alternantibus vel irregularibus, rotundatis, lobatis, vel angulatis, 10-15 × 7-8; peri 4821

theciis numerosis rotundatis, obscure brunneis, subopacis, 40-50 μ diam., irregulariter dehiscentibus, contextu ex hyphis radiatis 3-4 μ latis composito, mox pseudo-parenchymaticis; ascis ovatis 25-30 × 15, octosporis, aparaphysatis; sporidiis elongatis, utrinque rotundatis, constrictis, fuscis, laevibus, 12-15 × 4-5, loculo superiore majore.

Hab. in foliis Breyniae acuminatae (Euphorbiaceae), Bontoc, Luzon, Ins. Philipp.

30. **Asterina Crotonis** Syd., Ann. Mycol. XIV, 1916, p. 91. — Hypophylla, plagulas primo orbiculares dein plus minus confluentes et effusas irregulares tenues atro-griseas formans; mycelio haud copioso ex hyphis breviter ramosis copiose anastomosantibus fuscis 4,5-3 μ crassis septatis (articulis 15-20 μ longis) vix undulatis rectiusculis composito; hyphopodiis modice numerosis, alternantibus, continuis, sessilibus, plerumque modice lobatis, raro integris, 10-14 × 7-9; thyriotheciis laxe gregariis, orbicularibus, 150-200 μ diam., ex hyphis olivaceo-brunneis 5-6 μ crassis (articulis 9-11 μ longis) rectis contextis, ad ambitum non vel vix fimbriatis, demum late apertis; ascis ovato-globosis, aparaphysatis, 45-50 × 30-40, octosporis; sporidiis oblongis, levibus, fuscis, medio septatis et constrictis, 20-25 × 9-12. 4822

Hab. in foliis Crotonis sp. (Euphorbiaceae), Roraima, Brasiliae (E. Ule).

31. **Asterina Cassiae** Syd., Enum. Philipp. Fungi I, in Philipp. Journ. of Sci. VIII (1913) p. 275. — Mycelio tenui, epiphyllo, maculiformi vel plus minusve effuso, atro, ex hyphis tenuibus, dilute fuscis, dense ramosis, 3-4 μ cr., parce septatis (articulis longitudine variabilibus, mox 15-20 μ, mox multo longioribus) composito; hypho-podiis haud numerosis, plerumque alternis, rarissime oppositis, continuis, erectis, fuscis, saepe varie lobatis, 9-12 × 4-5; peritheciis dense aggregatis, rotundatis, 100-140 μ diam., applanatis, stellatim dehiscentibus, tenuibus, contextu griseo-viridulo ex hyphis 2,5-3 μ crassis strato simplici radiato-contextis, peripherice subinde hyphis paucis flexuosis brevibus fimbriatis; ascis ovato-globosis, aparaphysatis, 26-34 × 22-28, octosporis; sporidiis oblongis, utrinque rotundatis, medio-septatis, non vel leniter constrictis, levibus, 16-20 × 6-7, ex hyalino fuscis, loculis aequalibus; pycnidiis similibus copiose praesentibus, minoribus, 70-90 μ diam., conidiis continuis, semper angulatis, obscure olivaceo-fuscis, subopacis, 12-14 μ diam. 4823

Hab. in foliis vivis Glochidionis Ilenosii (Euphor-

biaceae), non Cassiae timorensis, Luzon, Prov. Bataan, Limay, ins. Philipp. (P. W. Graff) — Cnfr. l. c. p. 490.

32. **Asterina lobulifera** Syd., Philipp. Journ. of Sc., Bot., IX, 1914, p. 181. — Epiphylla, plagulas tenuissimas irregulares primitus minutas dein plus minus confluentes griseo-atras formans; mycelio ex hyphis rectis vel rectiusculis fuscis ramosis septatis 4-6 μ crassis composito; hyphopodiis numerosis, alternantibus, totis 10-16 μ longis, cellula basali plerumque brevissima vel usque ad 6 μ longa, cellula superiore grosse 2-4-lobata et 10-12 μ lata; perithecis densiuscule dispositis, tenuibus, rotundatis, 100-140 μ diam., inversis, mox stellatim dehiscentibus, contextu ex hyphis obscure fuscis 3-3,5 μ crassis rectis crebre septatis (articulis 8-10 μ longis) regulariter strato simplici composito; ascis globosis aparaphysatis 25-30 μ longis, 20-25 μ latis, octosporis; sporidiis conglobatis, oblongis, utrinque rotundatis, medio 1-septatis parum constrictis, levibus, ex hyalino fuscis, 16-18 × 7-8,5; pycnidiosporis simul praesentibus continuis, fuscis, centro zonula hyalina cinctis, 15-18 × 8-10. 4824

Hab. in foliis Glochidionis sp. (Euphorbiaceae), Palawan, Taytay, Ins. Philipp. (Merrill). — *Ast. lobatae* Syd. proxima.

33. **Asterina sphaeropoda** Syd., Ann. Mycol. XV, 1917, p. 242. — Epiphylla, plagulas parum perspicuas primo orbiculares 3-5 mm. latas sed mox confluentes tunc multo majores effusas formans, tandem totam folii superficiem vel magnam ejus partem occupans; mycelium rectangulariter ramosum, ex hyphis rectis fuscis 7-8,5 μ crassis septatis (articulis 25-35 μ longis) formatum; hyphopodia copiosa, continua, globosa, subinde hemisphaerica, semper integra, 10-12 μ alta et lata; thyriothecia densiuscule dispersa, plana, 160-200 μ diam., e singulo strato hypharum 3-3,5 μ crassarum dilute brunnearum peripheriam versus torulosarum in centro subrectarum vel flexuosarum septatarum (articulis 10-12 μ longis) radiatim contexta, membrana basali nulla, stellatim dehiscentia; asci ovato-oblongi, aparaphysati, 50-60 × 30-35; sporae oblongae, medio septatae, vix vel leniter constrictae, brunneae, leves, 24-26 × 10-13. 4825

Hab. in foliis Ostodis sp. (Euphorbiaceae), San Antonio Laguna, Ins. Philipp. (M. Ramos).

34. **Asterina cylindrophora** Syd., Ann. Mycol. XV, 1917, p. 240. — Amphigena, plerumque autem epiphylla, plagulas tenues arachnoideas primitus minutas mox confluendo majores et irregulares formans mycelium ex hyphis rectis rectangulariter alterne vel opposite ramosis firmis obscure brunneis 7-8 μ crassis septatis (articulis 20- 4826

30 μ longis) compositum, hyphopodia plerumque exacte opposita, saepius cylindracea, integra, 16-22 μ longa, 7-9 μ lata, bicellularia, cellula inferiore minutissima, patentia; thyriothecia sparsa, rotundata 160-250 μ diam., plana non fimbriata, stellatim dehiscentia, e strato singulo hypharum rectarum 2-3 μ crassarum septatarum (articulis 7-12 μ longis) obscure castaneo-brunnearum contexta; asci aparaphysati, ovato-globosi, perfecte evoluti non visi; sporae oblongo-ellipsoideae, utrinque rotundatae, medio vel circa medium septatae et valde constrictae, verruculosae, castaneo-brunneae, 34-36 × 18-20, cellula inferiore plerumque minore.

Hab. in foliis Scolopiae sp. (Flacourtiaceae), Los Baños, Laguna Ins. Philipp. (C. F. Baker).

35. **Asterina escharoides** Syd., Leafl. Philipp. Bot., IV, 1911, Art. 62, p. 1155. — Peritheciis amphigenis, irregulariter aggregatis, saepe in greges rotundatos 2-10 mm. latos dispositis, subinde etiam per magnam folii partem aequaliter vel irregulariter distributis, radiatim contextis, centro perforatis tenuibus, 100-175 μ diam., ambitu fibrillis 40-70 μ longis praeditis, atris, mycelio tenui parce evoluto, et hyphis 4-6 μ crassis ramosis septatis, hyphopodia minuta 6-9 μ longa gerentibus composito; ascis globosis vel subglobosis, 32-42 × 30-35, octosporis; sporidiis conglobatis, ellipsoideis, utrinque rotundatis, medio 1-septatis et constrictis, ex hyalino brunneis, verrucis lineatim dispositis distincte obsitis, 20-26 × 11-14. 4827

Hab. in foliis Plateae apoensis (Icacinaceae), et Pittospori clementis (Pittosporaceae), Todaya, ins. Apo, Distr. Davao, ins. Mindanao in Philipp. (Elmer).

36. **Asterina Litseae** H. S. Yates, The Philipp. Journ. of Sc. Bot., 13., 1918, p. 373. — Amphigena, plerumque epiphylla, plagulas irregulares, plus minus totum folium occupantes obtecta; mycelio effuso, laxo, ex hyphis obscure fuscis 3,5-4,5 μ latis anastomosantibus radiantibus formato; ramis irregularibus; hyphopodiis numerosis, unicellularibus, 7-8 μ longis, 3-5 μ latis, irregulariter dispositis; peritheciis numerosissimis, gregariis, rotundatis, 100-140 μ diam., stellatim dehiscentibus, convexis, contextu ex hyphis brunneis 2-3 μ latis, ambitu brevibus radiantibus fimbriatis praedito; ascis paraphysatis, ovoideo-globosis, 28-32 × 18-24, octosporis; sporidiis ellipsoideis, utrinque rotundatis, medio 1-septatis et constrictis, brunneis, laevibus, 15-17 × 8-9. 4828

Hab. in foliis Litseae (Lauraceae), Burgos, Prov. Norte, Luzon, Ins. Philipp. (Ramos).

37. **Asterina Neolitseae** H. S. Yates, The Philipp. Journ. of Sc. Bot., 13., 1918, p. 374. — Epiphylla; plagulas suborbiculares, 4-10 mm. diam. vel confluentes, atras efformans; mycelio ex hyphis brunneis septatis 5-7 μ crassis longe articulatis (30 μ) anastomosantibus formato; hyphopodiis numerosis, alternantibus, bicellularibus; cellula superiore lobata, 15 μ lata; cellula inferiore 4-5 μ longa; peritheciis numerosis, rotundatis, 150-170 μ diam., applanatis, obscure brunneis, opacis; contextu ex hyphis 3-4 μ latis radiantibus composito, articulis 6-7 μ longis, ambitu fimbriatis; ascis ellipsoideis, octosporis, 60 × 25-30, aparaphysatis; sporidiis oblongis, ellipsoideis, utrinque rotundatis, constrictis, fuscis, verruculosis, 44-46 × 14-15. 4829

Hab. in foliis Neolitseae (Lauraceae), Prov. Abra, Mount Posney, Luzon, Ins. Philipp. (Ramos).

38. **Asterina Verae-crucis** Theiss. in Sacc., Ann. Mycol. XII, 1914, p. 300. — Mycelio plagas irregulares epiphyllas, confluentes, opace nigras efformante; hyphis radiantibus, rectis, olivaceo-brunneis, opposite ramosis, 6-7 μ cr., septis plus minusve distantibus; hyphopodiis alternis, continuis, hemisphaericis, integerrimis, 13-15 μ diam. concoloribus; peritheciis inversis semiglobosis, vertice radiatim fisso, contextu ex hyphis olivaceo-brunneis, radiatis, 5-6 μ cr., rectis (cellulis circ. 10 μ longis) margine non fimbriato; ascis aparaphysatis, ovoideo-piriformibus, dein late ellipsoideis, 66 × 54, octosporis; sporidiis phaeodidymis, obscure brunneis, cellulis subaequilongis, ad septum constrictis, 30-35 × 15-17. 4830

Hab. in foliis subvivis Laurineae cujusdam (? Litsaea), Veracruz, Mexico (S. Bonansea). — Socia adest *Englerula mexicana* Theiss.

39. **Asterina trachycarpa** Syd. in Leaflets of Philipp. Bot. V (1912) p. 1542. — Mycelio hypophyllo, plagulas irregulares effusas indeterminatas, 3 mm. ad 3 cm. latas, subinde totam folii superficiem obtegentes efficiente, fusco-brunneo, ex hyphis tenuibus dense intertextis 3-4,5 μ cr., dilute brunneis, hyphopodiis destitutis vel hyphopodia rudimentaria tantum quasi ramos breves gerentibus composito; peritheciis irregulariter sparsis, inaequalibus, vix discoideis, sed plerumque varie angulatis, 125-180 μ longis, irregulariter radiatim contextis, centro mox fatiscentibus; ascis ovato-globosis vel ovatis, 30-40 × 22-26, octosporis; sporidiis elliptico-oblongis, utrinque rotundatis, infra medium 1-septatis et valde constrictis, ubique verrucosis, fusco-brunneis, 20-25 × 10-11, loculo superiore multo majore. 4831

Hab. in foliis vetustis Derridis atro-violaceae (Leguminosae), Puerto Princesa, Palawan, ins. Philipp.

40. **Asterina singaporensis** Sydow, Ann. Mycol. 18., 1920, p. 159. — 4832
Epiphylla, plagulas tenues orbiculares 2-5 mm. diam. formans; mycelium laxum, ex hyphis rectis brunneis 3-4 μ crassis rectangulariter ramosis compositum; hyphopodia modice copiosa, hinc inde dispersa, raro opposita cylindracea vel subcylindracea, continua, integra, 10-15 μ longa, ca. 4-4,5 μ crassa; thyriothecia dense gregaria, regularia, semper orbicularia, 80-110 μ diam., ad ambitum fimbriata, regulariter ex hyphis fuscidulis semper rectis 3-4 μ crassis contexta; asci ovato-globosi, ut videtur aparaphysati, 8-spori, 30-40 × 20-24; sporae ellipsoideo-oblongae, medio vel circa medium 1-septatae, ex hyalino fuscae, 16-20 × 6-8, loculis leniter inaequalibus.

Hab. in foliis Derridis sinuatae (Leguminosae), Singapore, Straits Settlements, Asiae (C. F. Baker).

41. **Asterina Holocalycis** Speg., Mycet. Argent. VI, Anal. Mus. Nac. 4833
Buenos Aires XXIII (1912) p. 81. — Plagulis saepius epiphyllis, discoideis, subcrustaceis, arcte adnatis, 0,5-2 mm. diam., nigris; subiculo parcissimo, hyphis flexuosis, alterne ramosis, fuligineis, laxe septulatis, 5-6 μ cr., hyphopodiis paucis, alternis, sessilibus, subglobosis, 12-15 μ diam., verruculosis; peritheciis centro plagularum dense constipatis, dimidiato-scutatis, 100-150 μ diam., contextu parenchymatico-sinuoso, radiante, fuligineo, ostiolo circulari obsoleto pertusis; ascis ellipsoideis, apice crasse tunicatis, basi cuneato-attenuatis, 50 × 25-30, filiformi-paraphysatis; sporidiis tristichis, cylindraceo-ellipsoideis, obtusis, ad septum non vel leniter constrictis, loculo infero nonnihil longiore, primo hyalinis dein fuligineis, 22-26 × 8-10.

Hab. ad folia viva Holocalycis Balansae (Leguminosae), in silvis prope Puerto Leon, Misiones, Argentina.

42. **Asterina (Clypeolaster) loranthicola** H. et P. Sydow, Ann. Mycol. XII, 4834
1914, p. 266. — Amphigena, plagulas primitus rotundatas minutas 1-3 mm. diam. dein saepe confluentes formans; mycelio laxo, ex hyphis rectis vel fere rectis brunneis 4-6 μ crassis laxe irregulariterque ramosis composito; hyphopodiis haud numerosis, alternantibus, sessilibus, continuis, cylindrico-obovatis, saepe uncinatis, 9-11 μ altis, 5-6 μ latis, thyriotheciis dense aggregatis, semper orbicularibus, applanato-hemisphaericis, 100-160 μ diam., contextu ex hyphis rectis crebre septatis 3,5-5 μ latis in articulos cubicos

v. parum elongatos (usque 7 μ longos) divisis composito, peripherice sat copiose fimbriatis, facile in sectores secedentibus; ascis aparaphysatis, ovato globosis, octosporis, 30-38 × 24-30; sporidiis ellipsoideo-oblongis, medio septatis et constrictis, utrinque rotundatis, ex hyalino brunneis, 20-24 × 8-11, levibus, cellula superiore saepe leniter latiore; thyriotheciis conidiiferis minoribus; conidiis elliptico-piriformibus, continuis v. medio spurie septatis, brunneis, 15-22 × 9-11.

Hab. in foliis Loranthi sp. (Loranthaceae), Quelimane, Africa or. lusitanica (J. B. Evans). — *Ast. consociatae, congestae, Büttneriae* proxima sed differt praecipue hyphis mycelicis validioribus.

43. **Asterina Phoradendri** P. Henn., Hedw. v. 48 (1908) p. 12. — Maculis mycelii amphigenis, rotundatis, atris, hyphis repentibus, atrofuscis, septatis, 3 μ circ. crassis; peritheciis sparsis vel aggregatis, dimidiato-scutatis, celluloso-radiatis; ascis ovoideis vel ellipsoideis, apice rotundato-tunicatis, 4-8-sporis, paraphysatis, 50-95 × 40-50; sporidiis ovoideis, medio septatis, constrictis, atris, 30-40 × 20-24. 4835

Hab. in foliis Phoradendri lanceolato-elliptici (Loranthaceae), Morro Pellado, S. Paulo, Brasilia.

44. **Asterina confertissima** Syd., Ann. Mycol. XIV, 1916, p. 90. — Epiphylla, plagulas distincte orbiculares 1-3 mm. diam. non vel vix confluentes maculiformes atras formans; mycelio modice evoluto, laxo, radiante, ex hyphis fuscis irregulariter ramosis 5-6 μ crassis flexuoso-curvatis remote septatis (articulis usque 50 μ longis) composito; hyphopodiis modice numerosis, alternantibus, sessilibus, continuis, ovato-globosis, late conicis usque ovato-oblongis, 10-16 μ longis, 6-9 μ latis, integris, raro lenissime lobulatis; thyriotheciis densissime stipatis, rotundatis, 120-160 μ diam., irregulariter stellatim dehiscentibus, tandem latiuscule apertis, contextu opaco ex hyphis obscure olivaceis dense flexuosis vel fere submaeandrice curvatis usque ad centrum serratis vel dentatis, 3,5-4 μ crassis (articulis 10-12 μ longis) composito, ad ambitum hyphis similibus fimbriatis. Ascis aparaphysatis, ovatis vel ovato-oblongis, apice rotundatis, crasse tunicatis 35-50 × 18-26, octosporis; sporidiis ellipsoideo-oblongis, utrinque rotundatis, medio 1-septatis et parum vel leniter constrictis, levibus, fuscidulis, 17-20 × 8-10. 4836

Hab. in foliis Arthrostemmatis campanularis (Melastomataceae), Serringal S. Francisco Rio Acre, Brasilia (E. Ule).

45. **Asterina Astroniae** H. S. Yates, Philipp. Journ. Sc. Manila, XII 4837

(1917) p. 370. — Epiphylla; plagulis suborbicularibus vel irregularibus, 4-8 mm. diam., saepe confluentibus, atris, mycelio ex hyphis paucis brunneis septatis anastomosantibus irregulariter ramosis 3-4 μ latis composito; hyphopodiis unicellularibus, paucis, irregulariter distributis, ovoideis, elongatis integris vel lobatis, 5-6 μ longis, 4-6 μ latis; peritheciis numerosis in quaque macula, suborbicularibus, applanatis, 160-200 μ diam., irregulariter dehiscentibus, contextu radiatim, ex hyphis obscure brunneis 2-4 μ diam. composito, ambitu vix fimbriato; ascis subglobosis vel ovoides, 45-55 × 28-35, octosporis, paraphysatis; sporidiis conglobatis, oblongis, utrinque rotundatis, ad medio 1-septatis, constrictis, fuscis, 18-28 × 10-12.

Hab. in foliis Astroniae sp. (Melastomataceae), Catubing River Samar, Ins. Philipp. (Ramos).

46. **Asterina transiens** Theiss., Gatt. Asterina, p. 42, tab. VI fig. 29-30 et VIII fig. 6 (1913). — Epiphylla; mycelio radiante soros minutos dense super folium sparsos sistente; hyphis rectis, opposite vel alterne ramosis, reticulatis, 3,5-5 μ crassis, late fusco-olivaceis; hyphopodiis alternis, cylindraceo-conicis, integris, 6-10 × 4 (rarius depressis, 4-5 × 5-8, subsinuatis); peritheciis paucis in centro mycelii aggregatis, 150-220 μ diam., orbicularibus vel ellipticis, usque ad 250-340 × 170-220 (rarius linearibus usque ad 450 × 120), stellatim vel rima lineari dehiscentibus, ex hyphis angustis, 3-4 μ crassis, brunneis opacissime contextis, margine fuscidulo subpellucido subcrenulatoque; ascis nunc ellipsoideis, 32-40 × 22 et sporidiis tristichis vel conglobatis, nunc oblongis, usque ad 50 × 18 et sporidiis distichis, jodi ope leniter coerulescentibus, saltem juventute, paraphysibus hyalinis flexuosis simplicibus obvallatis, octosporis; sporidiis 17-19 × 6-8, utrinque rotundatis, brunneis, constrictulis, cellula superiore plerumque globosa, inferiore cylindracea. 1838

Hab. in foliis Miconiae Candolleanae (Melastomataceae), in Brasilia. — Ad *Lembosiam* vergens.

47. **Asterina Miconiae** Theiss., Ann. Mycol. XI, 1913, p. 440. — Mycelio dense reticulato, hyphis rectis, saepe torulosis, brunneis 3,5-4 μ cr., alterne ramosis; hyphopodiis alternis, continuis, breviter cylindraceis vel subglobosis, 6-7 × 5. Thyriothecia inversa, dimidiata, hemisphaerica stellatim dehiscentia, 150-200 μ diam., hyphis brunneis 4 μ crassis opace radiatim contexta, peripherice hyphis rectilineis torulosis densiuscule fimbriata, membrana basilari destituta. Asci paraphysati elliptico-clavati, 50 × 22-28, octospori. Sporae brun- 1839

neae, 20-25 × 9-11, utrinque rotundatae, cellulis subaequalibus.

Hab. in foliis M i c o n i a e sp. (Melastomataceae), Sao Paulo, Brasiliae.

48. **Asterina incisa** Syd. in Syd. et Butler, Ann. Mycol. IX, 1911, p. 390. — Peritheciis epiphyllis, quoad formam variabilibus, rotundatis, ellipticis v. saepissime oblongis aut elongatis (*Lembosiae* ad instar) et tunc ut plurimum confluentibus, quasi profunde lobatis (lobis circ. 100-175 μ latis rima longa subhysterioidea v. irregulari dehiscentibus), atris, 300-500 μ longis, contextu opaco indistincte radiato, ambitu hyphis plus minus radiantibus ramosis anastomosantibus 4-7 μ cr., hyphopodia pauca gerentibus cinctis; ascis ovatis usque clavatis, apice valde incrassatis, 38-54 × 26-30, paraphysatis, octosporis; sporidiis conglobatis, ellipsoideis v. oblongo-ellipsoideis, utrinque rotundatis, medio septatis et constrictis, ex hyalino brunneis, levibus, 17-20 × 8-9. 4840

Hab. in foliis W e b e r a e c o r y m b o s a e (Melastomataceae), Balehonnur, Mysore Indiae or. (E. J. Butler).

49. **Asterina Maublancii** (Arnaud) A. Maublanc, Bull. Soc. Mycol. de Fr. t. 36., 1920, p. 38, fig. 1-2, *A. Melastomatis* Lév. var. *Maublancii* Arnaud, Ann. Ecole nat. Agricult. Montpellier, t. 16., 1918, p. 169, fig. 21. — Maculis amphigenis (praecipue epiphyllis), sparsis, 2-5 mm. diam., rotundatis, nigris; hyphis repentibus, reticulatis, 7-8 μ crassis, septatis; hyphopodiis simplicibus, ovoideis vel piriformibus, sessilibus. Peritheciis orbicularibus, gregariis, saepissime confluentibus, elongatis vel trigonis, carbonaceis, nigris, pariete crassa, margine vix fimbriata. Ascis ovoideis, crasse tunicatis, paraphysatis, 8-sp., 65-82 × 38-48; sporidiis conglobatis, ellipticis vel fere piriformibus, medio 1-septatis constrictisque, loculis subaequalibus vel inferiore paulum angustiore, brunneis, 30-35 × 12-16. 4841

Hab. in foliis vivis M e l a s t o m a t a c e a e cujusdam, Alto de Boe Vista, p. Rio-de-Janeiro, Brasiliae.

50. **Asterina Cipadessae** H. S. Yates, Philipp. Journ. Sc. Manila XII (1917) p. 371. — Epiphylla; maculis atris primo orbicularibus, 2-4 mm. diam., mox confluentibus et plus minusve totam superficiem folii obtegentibus; mycelio ex hyphis brunneis ramosis anastomosantibus 3-4 μ cr. composito, hyphopodiis numerosis, plerumque oppositis vel etiam alternantibus, irregulariter 2-4 lobatis, 7-10 μ longis; peritheciis numerosis, 150-250 diam., obscure brunneis subopacis vel opacis, rotundatis vel ellipsoideis, irregulariter dehiscentibus, contextu ex hyphis septatis radiatis 5-7 μ latis composito, 4842

margine vix fimbriatis; ascis ovatis, 35-45 × 22-27, octosporis, paraphysatis; sporidiis oblongis, utrinque rotundatis, ad medium 1-septatis, constrictis, obscure brunneis, papillatis, 28-32 × 10-12.

Hab. in foliis Cipadessae (Meliaceae), Kolinge, Luzon Ins. Philipp.

51. **Asterina opposita** Syd. in Leaflets of Philipp. Bot. VI (1913), p. 4843
1926. — Epiphylla, maculas atras circulares 2-10 mm. latas efformans; mycelio ex hyphis dense intertextis, ramosis, septatis, 4,5-6,5 μ latis, atro-brunneis, opacis composito; hyphopodiis numerosissimis, plerumque perfecte oppositis, continuis, obtusis, opace fuscis, 10-14 × 4,5-6; peritheciis ambitu circularibus, 120-175 μ diam., contextu ex hyphis amoene radiantibus, 2-2,5 μ crassis, strato simplici composito, subpellucidis, fuscidulis; ascis globosis, subglobosis vel ovatis, 42-52 × 30-40, octosporis, aparaphysatis; sporidiis oblongis, utrinque rotundatis, medio 1-septatis et leniter constrictis, levibus, primo hyalinis dein brunneis, 24-28 × 12-14.

Hab. in foliis Meliaceae cujusdam, Cabadbaran, Mindanao, ins. Philipp. — *A. Elmeri* Syd. cognata sed notis variis distincta.

52. **Asterina mandaquiensis** P. Henn., Hedw. vol. 48 (1908) p. 12. — 4844
Maculis mycelii epiphyllis, effusis, atro-crustaceis; hyphis fuscis, ramosis, 2-3,5 μ crassis, conidiis fusoideis, medio 1-septatis, hyalino-fuscidulis, 10-18 × 2,5-3; peritheciis sparsis vel gregariis, dimidiato-scutatis, radiato-cellulosis, 200-250 μ diam.; ascis ovoideis, apice tunicatis, octosporis, 35-50 × 20-30; sporidiis ovoideis vel ellipsoideis, obtusis, medio septatis, paulo constrictis, atro-fuscis, 20-25 × 8-10.

Hab. in foliis Eugeniae unifloraе (Myrtaceae), Mandaqui, Serra Cantareira, S. Paulo, Brasiliae.

53. **Asterina Eugeniae** H. S. Yates, Philipp. Journ. Sc. XII (1912) p. 4845
371. — Hypophylla, maculas saepe marginales, usque 10 mm. diam., orbiculares vel irregulares; mycelio ex hyphis paucis effusis laxis septatis obscure brunneis ramosis anastomosantibus 4-6 μ crassis composito; hyphopodiis paucis alternantibus vel irregularibus, cylindraceis, rotundatis, 10-12 × 6; peritheciis numerosis, applanatis, atris opacis, 225-275 μ diam., centro perforatis, contextu ex hyphis radiantibus 3-5 μ latis composito; ascis oblongo-ovatis, paraphysatis, octosporis, 50-60 × 20-22; sporidiis oblongis, utrinque rotundatis, 1-septatis, ad septa constrictis, hyalis, 20 × 5 (immaturis), loculo superiore majore.

Hab. in foliis Eugeniae sp. (Myrtaceae), Botangas, Luzon,

Ins. Philipp. (Ramos et Deroy).

54. **Asterina ditissima** Syd., Ann. Mycol. XV, 1917, p. 243. — Plerumque epiphylla, primitus plagulas minutas orbiculares dein confluentes formans et tandem totam folii superficiem obtegens; mycelium ex hyphis rectangulariter ramosis septatis (articulis 15-25 μ longis 5-6,5 μ crassis) obscure castaneis compositum; hyphopodia copiosissima, alternantia, continua, subhemisphaerica vel brevissime crasseque cylindracea, 9-12 μ alta, 8-10 μ lata; thyriothecia dense disposita, orbicularia, 200-320 μ diam., convexula, radiatim ex hyphis rectiusculis ca. 3 μ crassis composita, contextu opaco; asci oblongi, 50-64 × 20-28, octospori, aparaphysati; sporae ellipsoideo-oblongae, medio vel paullo infra medium septatae, non vel vix constrictae, fuligineae, leves, 22-25 × 10-12. 4846

Hab. in foliis Eugeniae sp. (Myrtaceae), Mt. Capoas, Palawan, Ins. Philipp. (E. D. Merrill).

55. **Asterina quarta** Racib. ap. Theiss., Gatt. Asterina, p. 77, tab. I fig. 9, IV fig. 10 et V fig. 20 (1913). — Epi-rarius hypophylla; hyphis 5-8 μ crassis, castaneo-brunneis, cellulis 12-16 μ longis; hyphopodiis cylindricis, integris, obtusis, rarissime breviter pedicellatis, 12-15 × 6-8; peritheciis 200-300 μ diam. ex hyphis 4 μ cr. opacissime contextis, peripherice hyphis valide crenulatis, laxe septatis fimbriatis, stellatim dehiscentibus; ascis aparaphysatis, ovatis, late tunicatis, octosporis, jodo coerulescentibus, 75-85 × 30-40; sporidiis brunneis, 20-22 × 11-14, laevibus, loculo supero latiore, infero angustato. 4847

Hab. in foliis Syzygii jambolani (Myrtaceae), Buitenzorg, Java.

56. **Asterina Rickii** Theiss., Gatt. Asterina, p. 69, tab. IV fig. 5 et V fig. 17 a, 18 a (1913) — *Seynesia? paraguayensis* Theiss., Dec. Fung. Bras. 68. — Mycelio laxo, amphigeno, imprimis epiphyllo; hyphis gracilibus, 3,5-4,5 μ crassis, opposite, rarius alterne ramosis, rectis, fuligineo-brunneolis, laxe septatis (cellulis 24-28 μ longis); hyphopodiis anguste cylindraceo-conicis, unicellularibus, integris, rectis, alternis, 10-13 μ longis, basi 4,5-5,5 μ crassis; peritheciis primo discoideis, papillatis, dein conice elevatis, demum hemisphaericis, 100-150 μ diam., stellatim dehiscentibus, demum usque ad marginem resolutis, laxe gregariis, ex hyphis brunneis, recto-radiantibus, 4,5-5 μ crassis (septis firmis, obscuris, 5,5-6,5 μ distantibus) contextis, peripherice hyphis griseis vix septatis tenuioribus 3 μ cr. leniter flexuoso-torulosis fimbriatis; ascis globosis 35-40 μ vel ovatis 4848

38 × 30 vel ellipsoideis 50 × 32, aparaphysatis, jodo non coerulescentibus, octosporis; sporidiis conglobatis, 18-22 × 8-9, rotundatis, levibus, constrictis, brunneis, loculo supero parum latiore.

Hab. in foliis Myrtaceae cujusdam, Sao Leopoldo, Rio Grande do Sul, Brasilia. — Ab *A. ampullulipeda* et *A. huallagensi* hyphopodiis tenuioribus, conicis sporidiisque minoribus differt.

57. **Asterina serrensis** P. Henn., Hedw. vol. 48, 1908, p. 12. — Maculis 4849
mycelii epiphyllis, fuscidulis; hyphis fuscis, ramosis; peritheciis sparse gregariis, dimidiato-scutatis, radiato-cellulosis, 250-300 μ diam.; ascis clavatis, apice rotundatis crasseque tunicatis, octosporis, 80-110 × 20; sporidiis conglobatis, ovoideis, rotundatis, medio septatis, constrictis, cellula superiore granulatis, atro-fuscis, 20-26 × 8-10.

Hab. in foliis Myrtaceae, Alto da Serra, S. Paulo, Brasilia.

58. **Asterina oligocarpa** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 4850
558. — Hypophylla plagulas effusas confluentes formans; mycelio laxo, ex hyphis rectis rectangulariter ramosis fuscis crebre septatis 6-7 μ crassis composito; hyphopodiis modice numerosis, cylindraceis, obtusis, rarius irregularibus, continuis, 8-14 μ longis, 6-8 μ latis, alternantibus; thyriotheciis dense gregariis, exiguis, rotundatis, 50-70 μ diam., fuligineis, ex hyphis 4-5 μ crassis crebre septatis (articulis 4-5 μ tantum longis) uno strato compositis, mox latissime apertis; ascis paucis (2-5) in quoque thyriothecio, ovato-globosis, aparaphysatis, 40-45 μ longis, 30-35 μ latis, 4-8-sporis; sporidiis oblongo-ellipsoideis, utrinque obtusis, medio septatis et valde constrictis, verrucosis, in maturitate opace fuscis, 20-25 μ longis 10-11 μ latis, loculis fere aequalibus vel supero parum majore; thyriotheciis conidigeris similibus; conidiis piriformibus, continuis, opace fuscis, 22-24 μ longis, 15-18 μ latis.

Hab. in foliis Olacis imbricatae (Olacaceae), Angat pr. Bulacan, et prov. Rizal, Ins. Philippin. (M. Ramos).

59. **Asterina crebra** H. Sydow, Ann. Mycol. XI, 1913, p. 327. — Ma- 4851
culas atras amphigenas primo orbiculares minutas 1-3 mm. latas tandem plus minus confluentes et per totam folii superficiem dispositas efformans; mycelio ex hyphis ramosis septatis (articulis 9-15 μ long.) fuscis 5,5-7 μ latis contexto, hyphopodiis continuis, breviter cylindraceis, regularibus, alternantibus, haud numerosis, 8-13 μ long., 4,5-6 μ latis, apice obtusis; peritheciis dimidiato-scutatis, amoene radiatim contextis, stellatim dehiscentibus, 90-125 μ

diam., ex hyphis strato simplici ordinatis ca. 4 μ latis fuscis contextis; ascis ovatis, aparaphysatis, 27-38 × 20-30, octosporis; sporidiis ellipsoideis verrucosis, in maturitate brunneis, ad septum constrictis, 18-22 × 7-9; pycnidiis numerosis simul praesentibus, 80-110 μ diam.; sporulis continuis, ovatis, fuscis, 15-20 × 10-13.

Hab. in foliis Opiliae amentaceae Roxb. (Olacaceae), Bolampatty valley Coimbatore, Madras Pres. (C. E. C. Fischer).

60. **Asterina spissa** Syd. in Syd. et Butl., Ann. Mycol. IX, 1911, p. 392. — Peritheciis epiphyllis, hinc inde maculiformiter aggregatis v. saepe per totum folium plus minus aeque distributis, radiatim contextis, 130-170 μ diam., stellatim dehiscentibus, mycelio parco ex hyphis 4-5 μ cr. composito insidentibus, hyphopodiis ut videtur nullis, ascis ovatis v. ovato-globosis, octosporis, 38-45 × 30-35; sporidiis ellipsoideis v. ellipsoideo-oblongis, utrinque rotundatis, medio septatis et constrictis, brunneis, distincte verrucosis, 20-24 × 9-12. 4852

Hab. in foliis Jasmini sp. (Oleaceae), Chittagong, Indiae or. (E. J. Butler).

61. **Asterina jasminicola** H. S. Yates, The Philipp. Journ. of Sc., Bot. 13., 1918, p. 373.— Peritheciis amphigenis hinc inde maculiformiter aggregatis vel saepe per totum folium plus minusve aeque distributis, maculis 2-6 mm. diam.; mycelio ex hyphis brunneis 4-5 μ diam. tortuosis composito; hyphopodiis numerosis bicellularibus, irregulariter distributis nunquam oppositis; cellula superiore irregulariter angulata et lobata, 8-10 μ diam., inferiore 5,5-6,5 × 4-4,5; peritheciis numerosis, globosis, atris, opacis, irregulariter dehiscentibus; ascis globosis, 22-26 μ diam., octosporis, paraphysatis; sporidiis medio 1-septatis, brunneis, verrucosis, ellipsoideo-oblongis, utrinque rotundatis, 17-19 × 8-10. 4853

Hab. in foliis Jasmini (Oleaceae), Burgos, Prov. Llocos Norte, Luzon, Ins. Philippin. (Ramos).

62. **Asterina Liparidis** Rac. ap. Theiss., Gatt. Asterina (1913) p. 91, tab. VI fig. 37. — Amphigena; subiculo plus minusve dense reticulato, hyphis irregulariter nunc laxe nunc dense ramosis, flexuosis, saepe fortiter undulatis, 4-5,5 μ cr. brunneis; hyphopodiis alternis, sessilibus vel erectis, semper tamen unicellularibus, varie lobatis, 7-10 μ longis et latis; peritheciis congregatis, applanatis, 150-220 μ diam. vel ellipsoideis 250 × 150, centro umbilicatis et irregulariter dehiscentibus, ex hyphis obscure brunneis 4 μ cr., rectis (cellulis 6-8 μ longis) opace contextis, non fimbriatis; ascis ovatis, aparaphysatis, jodo obsolete cyanescentibus, 4-8-sporis, 30-38 × 4854

25-30 ; sporidiis (nondum plene maturis) 19-22 × 8-10, utrinque rotundatis, fusco-brunneolis (episporio tenuiter verrucoso ?), loculo supero plerumque latiore. — Conidiis (*Asterostomellae*) late ovatis, 18-25 × 13-16, atro-violaceis, medio hyalino-cinctis.

Hab. in foliis Liparidis sp. (Orchidaceae), Gedeh, Java.

63. **Asterina Bakeri** Syd., Ann. Mycol. XIV, 1916, p. 367. — Epiphylla, primitus plagulas tenues orbiculares 0,5-1 cm. diam. formans, tandem plagulis plus minusve confluentibus, totam folii superficiem, vel magnam ejus partem plus minus aequaliter obtegens; mycelio ex hyphis longiusculis sat copiose rectangulariter vel fere rectangulariter et opposite ramosis 3-5 μ crassis fumoso-fuscis rectiusculis septatis (articulis 10-16 μ longis) composito ; hyphopodiis propriis nullis, sed nodulis praesentibus ; nodulis hypharum copiosis, plerumque leniter, elongatis, rarius subglobosis, 6-8 μ latis ; thyriotheciis convexis, plerumque ambitu orbicularibus, 300-350 μ diam., ex hyphis rectis fusco-brunneis 3-4 μ crassis septatis (articulis 8-10 μ marginem versus usque 15 μ longis) compositis, ad ambitum copiose fimbriatis, rima dehiscentibus ; ascis ovatis, 50-70 × 30-40 singulis elongatis, 8-sporis, J- ; paraphysibus genuinis nullis ; sporidiis ellipsoideo-oblongis, utrinque rotundatis, medio constrictis, ex hyalino fuscis, in maturitate dense distincteque verrucosis, 26-36 × 12-14, loculis fere aequalibus vel superiore leniter majore. 4855

Hab. in foliis Daemonoropis (Palmae), Los Baños ins. Philipp. (S. A. Reyes).

64. **Asterina transversalis** Syd. in Leaflets of Philipp. Bot. V (1912) p. 1542. — Mycelio epiphyllo, effuso, tenui, maculas discoideas vel irregulares, magnas, 0,5-1,5 cm. latas, confluendo saepe majores efformante, ex hyphis longiusculis ramosis laxe intertextis, 5-7 μ cr., fuscis, saepe noduloso-incrassatis composito; nodulis hypharum plus minusve protuberantibus, utrinque v. rarius ad unum latus hypharum hemisphaerico-prominulis, vel etiam magis exertis, tunc irregulariter cylindraceis, usque ad 10 μ longis, 3-4 μ crassis, ex hyphopodia continua constituentibus ; peritheciis in mycelio densiuscule aggregatis, sed sine ordine dispositis, mox in directione nervorum folii ordinatis, mox et saepius autem vario modo nervos transgredientibus, elongatis, angustis, minoribus 175-300 μ longis, majoribus fere usque ad 1 mm. elongatis, radiatim contextis, rima longitudinali irregulariter dehiscentibus, quasi lembosioideis, atris, radiantibus 3-6 μ crassis cinctis; ascis ovato-globosis, 50-60 × 40-50, octosporis ; sporidiis oblongis, utrinque rotundatis, medio 1-septa- 4856

tis, leniter constrictis, minute verruculosis, ex hyalino brunneis, 38-44 × 16-20.

Hab. in foliis P a l m a e cujusdam scandentis, Puerto Princesa, Palawan, ins. Philipp. — Species pulchra, perdistincta.

65. **Asterina perconferta** Trott. n. nov., *Aster. confertissima* Spegaz., Fungi Costaric. nonn. in Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 210, cum icon., non Sydow 1916. — Hypophylla, rarius epiphylla; subiculum parcissimum, hyphopodiis bi-v.trilobis alternis (8 × 10-12) praeditum; thyriothecia confertissima (5-10) subconfluentia saepius plagulas latiusculas subcrustaceas efficientia, membrana hypoasca destituta, astoma, discoidea, 80-120 μ lat., centro stellatim dehiscentia, atra, glabra, subopaca, medio subparenchymatica, ambitu fibroso-radiantia, margine parcissime denticulato-fimbriata; asci obovati aparaphysati superne crasse tunicati inferne brevissime crasseque pedicellati, octospori, 38-40 × 25-30; sporae didymae ad septum constrictulae, cellula supera subglobosa (9 × 9) et infera fere obovata parum angustiore ac longiore, fuligineae laeves, 18-20 μ long. 4857

Hab. in foliis vivis P a s s i f l o r a e (Passifloraceae) ignotae, prope S. Josè Costarica, America trop.—Ab *Ast. consociata* Mut. et *megalospora* in Passifloris etiam vigentibus diversa.

66. **Asterina piperina** Syd., Ann. Mycol. XV, 1917, p. 243. — Epiphylla, plagulas minutas parum perspicuas formans; mycelium latum, ramosum, parce evolutum, ex hyphis flexuosis anastomosantibus remote septatis fusco-olivaceis 3-5 μ crassis compositum; hyphopodia dispersa, bicellularia, 7-12 μ longa, cellula basali minuta, stipitiformi, cellula superiore angulata leniter lobata vel recurvata, rarius integra, 6-10 μ lata; thyriothecia gregaria, rotundata, 120 150 μ diam., e strato simplici hypharum subrectarum 2-2,5 μ crassarum subrectarum olivaceo-fuscarum contexta; asci ovato-globosi, aparaphysati 26-35 × 20-26, octospori; sporidia oblonga, utrinque rotundata, medio septata leniter constricta, 16-19 × 8-9, leves, brunneae, conidia simul praesentia continua, ovoidea, medio zonula angusta hyalina cincta, 12-15 × 9-10. 4858

Hab. in foliis P i p e r i s sp. (aff. P. B e t l e) (Piperaceae), Kalinga Luzon, Ins. Philipp. (H. S. YATES).

67. **Asterina Piperis** H. S. Yates, The Philipp. Journ. of Sc. Bot., 13., 1918, p. 374. — Mycelio epiphyllo, parce evoluto, tenue, laxo, effuso, ex hyphis brunneis 4 μ crassis formato; hyphopodiis alternantibus vel irregularibus, 2 cellularibus, cellula superiore irre- 4859

gulariter lobata, 6-8 μ longa, 4-5 μ lata, cellula inferiore, 4-5 μ longa; peritheciis numerosis, applanatis, rotundatis, brunneis, stellatim dehiscentibus, 115-130 μ diam., contextu ex hyphis fuscis 2-3 μ crassis composito, ambitu parum fimbriato; ascis globosis vel subglobosis, aparaphysatis, 25 × 20, octosporis; sporidiis conglobatis, oblongis, utrinque late rotundatis, medio 1-septatis et constrictis, fuscis, laevibus, 15-18 × 7-8.

Hab. in foliis Piperis sp. (Piperaceae), Bangui, Prov. Llocos Norte, Luzon, Ins. Philipp. (Ramos).

68. **Asterina densa** H. et P. Sydow, Ann. Mycol XII, 1914, p. 557. — 4860
Hypophylla, plagulas effusas saepe confluentes 0,5-2 cm. (vel ultra) longas aterrimas formans; mycelio densissimo ex hyphis valde ramosis obscure brunneis 4-5,5 μ crassis composito; thyriotheciis dense dispositis, carbonaceis, rotundatis, usque ellipsoideis, 140-170 μ diam., ambitu non fimbriatis, radiatim ex hyphis obscure castaneo-brunneis suberectis v. leniter flexuosis 3-3,5 μ latis crebre septatis (articulis 6-9 μ longis) contextis; ascis ovato-globosis, 40-55 × 35-40, aparaphysatis, octosporis; sporidiis oblongo-ellipsoideis, utrinque rotundatis, constrictis, ex hyalino fuscis, levibus, 24-26 × 9-10, loculo supero subinde leniter majore.

Hab. in foliis Pittospori pentandri (Pittosporaceae), prope Angat, prov. Bulacan, Ins. Philippin. (M. Ramos).

69. **Asterina Zizyphiae** H. S. Yates, The Philipp. Journ. of Sc., Bot., 4861
13., 1918, p. 375. — Amphigena; plagulas effusas, 2-5 mm. diam., saepe confluentes et totum folium plus minus occupantes efformans; mycelio ex hyphis brunneis anastomosantibus 6 μ crassis remote septatis (articulis 20-25 μ longis) ramosis composito; hyphopodiis irregularibus, unicellularibus, globosis, 10 μ diam.; peritheciis paucis, rotundatis, 120-170 μ diam., brunneis, ambitu non fimbriato, contextu radiatim ex hyphis brunneis leviter flexuosis 2-4 μ crassis composito; ascis octosporis, ovato-globosis, 40 × 30, aparaphysatis; sporidiis (immaturis) oblongo-ellipsoideis, utrinque rotundatis, medio 1-septatis, constrictis, laevibus, hyalinis, 15 × 10.

Hab. in foliis Zizyphi (Rhamnaceae), Mount Tulaog Prov. Tayabas Luzon, Ins. Philipp. (Ramos et Edaño).

70. **Asterina nodulifera** Syd., Philipp. Journ. of Sc., Bot., IX, 1914, 1862
p. 180. — Amphigena, saepius epiphylla, plagulas minutas 2-4 mm. diam. opacas formans; mycelio radiante, ex hyphis rectiusculis opposito-vel alternatim ramosis obscure brunneis opacis 6-10 μ latis non hyphopodiatis sed regulariter globoso-nodulosis (nodos 10-15 μ

crassis) composito; peritheciis inversis, in centro plagularum laxe dispositis, rotundatis, 250-340 μ diam., plano-conoideis, tandem stellatim dehiscentibus, radiatim contextis, ex hyphis brunneis subrectis vel flexuosis 3-4 μ crassis (articulis 10-14 μ longis) compositis; ascis globulosis usque ovatis, 40-55 × 38-44, aparaphysatis; sporidiis octonis, oblongis, utrinque late rotundatis, ad septum non vel vix constrictis, totis 30-35 μ longis, levibus, ex hyalino brunneis, cellula superiore globosa 11-13 μ diam., inferiore cylindracea 20-24 × 10-12.

Hab. in foliis Angelesiae splendentis (Rosaceae), Palawan Taytay, Ins. Philipp. (MERRILL).

71. **Asterina Canthii** H. S. Yates, The Philipp. Journ. of Sc. 13., Bot., 1918, p. 372. — Amphigena; maculas crustaceas, atras, irregulares, 5-6 mm. diam.; mycelio abundante, ad superficiem foliorum adpresso, ex hyphis anastomosantibus obscure brunneis 6-8 μ crassis formato; ramis oppositis vel alternantibus; hyphopodiis numerosissimis, oppositis, unicellularibus, oblongo-cylindraceis, apice rotundatis, 4-5 × 5; peritheciis rotundatis, atris, opacis, ambitu fimbriatis, 90-175 μ diam.; contextu subparenchymatico, irregulariter dehiscentibus; ascis oblongo-cylindraceis, 30-40 × 8-10, paraphysatis, octosporis; sporidiis medio 1-septatis et constrictis, brunneis, utrinque subacutis, 10-12 × 3-3,5. 4863

Hab. in foliis Canthii (Rubiaceae), Burgos, Prov. Llocos Norte, Luzon, Ins. Philippin. (RAMOS).

72. **Asterina platypoda** Syd., Ann. Mycol. XV, 1917, p. 241. — Epiphylla, plagulas tenues orbiculares ca. 1 cm. latas dein confluentes et plus minus effusas formans; mycelium laxum, rectangulariter ramosum, ex hyphis obscure brunneis rectiusculis vel irregulariter flexuosis septatis (articulis longiusculis) compositum, hyphopodia semper solitaria, parce evoluta, continua, plerumque conoidea, lata basi sessilia; rarius crasse cylindracea, 18-20 μ alta, basi 12-14 μ lata, thyriothecia laxe gregaria, plana, orbicularia, 250-350 μ diam., ex uno strato hypharum rectarum dilute brunnearum 3,5-4 μ crassarum septatarum (articulis ca. 10 μ longis) composita, ad ambitum haud fimbriata; asci ovato-globosi, aparaphysati, 70-85 × 55-70, octospori; sporae ellipsoideo-oblongae, medio septatae, non vel vix constrictae, utrinque rotundatae dilute brunneae leves, 37-42 × 18-21. 4864

Hab. in foliis Urophylli banahaensis (Rubiaceae), Mt Maquiling, Laguna, Ins. Philipp. (C. F. BAKER).

73. **Asterina Fagarae** H. S. Yates, The Philipp. Journ of Sc., 13., Bot. 1918, p. 373. — Epiphylla; plagulas orbiculares vel irregulares, 4-6 mm. diam., vel confluentes et superficiem foliorum obtegentes efformans; mycelio radiante, ex hyphis brunneis ramosis anastomosantibus 4-6 μ crassis composito; hyphopodiis numerosis, ramis simillimis, alternantibus vel irregularibus, 10-15 μ longis, 4-5 μ latis; peritheciis opacis, rotundatis, applanatis, 170-220 μ diam., stellatim dehiscentibus; contextu ex hyphis radiantibus obscure-brunneis 5-7 μ cr. composito; ascis ovatis, 50-55 × 35-40, octosporis, paraphysatis; sporidiis conglobatis, oblongis, utrinque late rotundatis, medio 1-septatis et constrictis, brunneis, laevibus, 22-25 × 11-13. 4865

Hab. in foliis Fagaraae Avicennae (Rutaceae), Prov. Rizal, Luzon, Ins. Philipp. (Ramos).

74. **Asterina banguiensis** H. S. Yates, The Philipp. Journ. of Sc. Bot., 13., 1918, p. 372. — Epiphylla; plagulas plus minus effusas, 0,5-2 cm. longas et latas formans, vel orbiculares et 3-6 mm. diam., vel confluentes et magnam partem folii occupantes; mycelio ex hyphis ramosis valde anastomosantibus obscure brunneis 5-6,5 μ crassis composito; articulis 15-22 μ longis; hyphopodiis numerosis, cylindraceis 10-12 μ longis, 5 μ latis; peritheciis numerosis, dense dispositis, rotundatis, 120-160 μ diam., late et plane convexis, opacis contextu et hyphis 2-4,5 μ crassis composito, ambitu mox magis fimbriato; ascis ovatis, octosporis, aparaphysatis, 45-50 × 18-22; sporidiis ovato-oblongis, medio septatis et constrictis, utrinque rotundatis, brunneis, laevibus, 20-22 × 8-10. 4866

Hab. in foliis Glycosmidis (Rutaceae), Bangui Prov. Llocos Norte, Luzon, Ins. Philipp. (Ramos).

75. **Asterina Rhabdodendri** Syd., Ann. Mycol. XIV, 1916, p. 92. — Hypophylla, plagulas parum perspicuas orbiculares vel confluendo irregulares 3-10 mm. diam. formans; mycelio ex hyphis rectis vel rectiusculis radiantibus fere rectangulariter ramosis obscure fuscis 4-5,5 μ crassis, septatis (articulis 10-25 μ longis) composito; hyphopodiis numerosis, exacte oppositis, rarius singulis unilateralibus, rectis, cylindraceis, obtusis, integris, continuis, 9-12 × 4-4,5; thyriotheciis sparsis vel laxe gregariis, orbicularibus, 130-200 μ diam., ambitu leniter fimbriatis, e strato simplici hypharum rectarum obscure fuscarum crebre septatarum (articulis 6-10 × 3-3,5) radiatim compositis, membrana basali nulla; ascis ovato-globosis, paraphysatis, 35-45 × 32-40, 4-8-sporis; sporidiis ellipsoideo-oblongis, medio 1-septatis et constrictis, facile in loculos secedentibus, fuscis, ver- 4867

rucosis, 23-26 × 12-15.

Hab. in foliis Rhabdodendri crassipedis (Rutaceae), Manaos, Rio Negro, Brasilia (E. Ule).

76. **Asterina decipiens** Syd. in Leaflets of Philipp. Bot. V (1912) p. 1540. — Peritheciis hypophyllis, plerumque per totam folii superficiem vel magnam ejus partem aequaliter denseque distributis, discoideis, 120-170 μ diam., atris, eximie radiatim contextis, stellatim dehiscentibus; mycelio haud copioso, ex hyphis flexuosis, densiuscule ramosis et intertextis, gracilibus, 3,5-4,5 μ cr. composito; hyphopodiis alternis, continuis, fuscis, late cylindraceis vel irregularibus, rectis vel curvatis, 7-9 × 3-4; ascis ovato-globosis, 15-25 × 12-18, octosporis; sporidiis elliptico-oblongis, medio vel circa medium 1-septatis, vix vel leniter constrictis, utrinque rotundatis, levibus, ex hyalino fuscis, 16-20 × 8-9; pycnidiis peritheciis similibus sed minoribus; sporulis late piriformibus, continuis, fuscis, 14-18 × 9-10. 4868

Hab. in foliis vetustis Champereiae Cumingianae (Santalaceae), Puerto Princesa, Palawan, ins. Philipp. — Habitu *A. Elmeri* Syd. similis sed hyphis, hyphopodiis et sporidiis alienis.

77. **Asterina Elmeri** Syd., Leafl. Philipp. Bot., IV, 1911, Art. 62, p. 1156. — Peritheciis epiphyllis, densissime aggregatis et maculas orbiculares 2-10 mm. diam., confluendo saepe irregulares formantibus, 120-180 μ diam., radiatim contextis, centro perforatis, atris, opacis; mycelio et hyphis dense intertextis anastomosantibus obscure brunneis 6-8 μ latis, hyphopodia solitaria vel opposita continua, 9-11 μ longa et 4-5 μ lata, gerentibus composito; ascis globosis vel subglobosis, 40-50 × 30-45, octosporis; sporidiis conglobatis, ellipsoideo-oblongis, utrinque rotundatis, medio 1-septatis et constrictis, ex hyalino brunneis, 25-30 × 10-14. 4869

Hab. in foliis Champereiae fragilis (Santalaceae), Magallanes Ms. Giting-giting, Prov. Capiz, ins. Sibuyan, ins. Philipp. (Elmer).

78. **Asterina opaca** H. et P. Syd., Ann. Mycol. X, 1912, p. 38. — Epiphylla, maculas atras orbiculares 1-3 mm. diam. efformans; hyphis brevibus, sed valde ramosis anastomosantibusque, castaneo-brunneis, 5-7 μ cr., densissime intertextis; hyphopodiis minutis, sessilibus, 1-cellularibus, castaneo-brunneis, apice rotundatis v. raro leniter attenuatis, alternantibus v. oppositis, 9-11 μ long. 5-6 μ latis; peritheciis saepe 1-2 tantum in quaque macula, in maculis majoribus usque 10 laxe dispositis, rotundatis, 150-250 μ diam., irre- 4870

gulariter disrumpentibus, atris, contextu opaco, ambitu vix fimbriatis; ascis ovato-globosis v. ovatis, apice leniter incrassatis, aparaphysatis, 50-70 × 35-46, octosporis; sporidiis conglobatis, ellipsoideis, utrinque late rotundatis, medio septatis et valde constrictis, levibus, ex hyalino castaneo-brunneis, 26-28 × 13-14.

Hab. in foliis Chrysophylli natalensis (Sapotaceae), Amanzimtote Natal, Africae austr. (E. M. Doidge).

79. **Asterina Chrysophylli** P. Henn., Hedw. vol. 48 (1908) p. 12. — Maculis mycelii epiphyllis, effusis, atris; hyphis ramosis, atris, 4-7 μ crassis; peritheciis aggregatis, dimidiato-scutatis, radiato cellulosis, margine fimbriatis, 200-250 μ diam; ascis ovoideis, octosporis, 50-60 × 40-45; sporidiis ovoideis vel ellipsoideis, medio septatis, constrictis, conglobatis, atris, 25-30 × 12-14. 1871

Hab. in foliis Chrysophylli sp. (Sapotaceae), Serra da Cantareira, S. Paulo, Brasilia.

80. **Asterina diaphorella** Sydow, Ann. Mycol, 17., 1919, p. 35. — Peraffinis *A. laxiusculae*, a qua differt hyphopodiis hemisphaericis 6-7 μ altis et latis et sporidiis minoribus, 26-30 × 11-14. 1872

Hab. in foliis Sideroxyli ferruginei (Sapotaceae), Santa Cruz Island, prov. Zamboanga, Mindanao, ins. Philippin. (E. D. Merrill). — Sydow, Fungi exotici exsicc. n. 269 sub *A. laxiuscula* Syd.

81. **Asterina laxiuscula** Syd., Enum. Philipp. Fungi I, in Philipp. Journ. of Sci. VIII (1912) p. 276. — Mycelio epiphyllo, parce vel modice evoluto, tenui, laxo, effuso, ex hyphis castaneo-brunneis, 4-5 μ cr., ramosis, remote septatis formato; hyphopodiis alternantibus, continuis, obtusis, rectis, crasse cylindraceis, 6-10 × 4-6, castaneis; peritheciis mox laxe sparsis, mox magis aggregatis, applanatis, rotundatis, extus stris, stellatim dehiscentibus, 150-220 μ diam., contextu opaco ex hyphis fuscis 3-4 μ cr. composito, ambitu parum vel modice fimbriatis; ascis ovatis, aparaphysatis, 55-75 × 40-50, octosporis; sporidiis conglobatis, oblongis, utrinque late rotundatis, medio septatis et constrictis, ex hyalino fuscis, levibus, 32-40 × 15-18. 1873

Hab. in foliis vivis Sideroxyli angustifolii et S. ferruginei (Sapotaceae), Luzon et Mindanao, ins. Philipp. (Merrill).

82. **Asterina Saccardoana** Theiss., Gatt. Asterina, p. 45, tab. VI fig. 31-32 (1913), *A. correaecola* Sacc. in herb., non Auct. — Hyphis micelialibus atro brunneis, subtorulosis, irregulariter ramosis, 8-9 μ crassis, laxe septatis; hyphopodiis raris, versiformibus, cylindricis, 1874

continuis, torulosis vel subsinuatis, 10-16 × 6-10; peritheciis hemisphaericis, compactis, ex hyphis rectis, obscure brunneis, 6-8 μ cr. opace radiato-contextis, peripherice non fimbriatis, e vertice stellatim dehiscentibus; ascis globosis vel ovatis, octosporis, 80-100 × 55-80, jodi ope coerulescentibus, fere sessilibus, paraphysibus sparse obvallantibus hyalinis, apice subcoloratis, basi ramosis, firmis, 3-4 μ crassis, septatis circumdatis; sporidiis maximis, 46-54 × 22-26, brunneis, utrinque rotundatis, ad septum constrictis, loculis vel aequalibus vel plerumque supero latiore et longiore, 26-29 × 23-26, inferiore 22-25 × 18-22.

Hab. in foliis Sideroxyli (Sapotaceae), in Australia.

83. **Asterina lobata** Syd. in Leaflets of Philipp. Bot. V (1912) p. 1541 et VI (1913) p. 1927. — Mycelio hypophyllo, maculas atras tenues irregulares saepe confluentes et subinde magnam folii partem occupantes efformante, ex hyphis tenuibus, dense reticulatim intertextis, remote septatis, brunneis, 4-5 μ crassis composito; hyphopodiis alternantibus, irregulariter 2-4-lobatis, 5-9 μ altis, lobis ad apicem rotundatis, 3-3,5 μ latis; peritheciis densiuscule dispositis, minutissimis, rotundatis, 90-125 μ diam., tenuissimis, mox irregulariter dehiscentibus, contextu brunneo; ascis ovato-globosis, 25-35 × 20-25, octosporis; sporidiis oblongo-ellipsoideis, utrinque obtusis, medio 1-septatis, levibus, ex hyalino fuscis, 13-18 × 6-7; pycnidiis peritheciis similibus, sporulis late piriformibus, continuis, fuscis, 18-22 × 14-17. 4875

Hab. in foliis vetustis Picrasmae philippinensis (Simarubaceae), Puerto Princesa, Palawan, ins. Philipp., nec non P. javanicae, Todaya, Mt. Apo, Mindanao, ins. Philipp.

84. **Asterina diaphana** Syd., Leafit. Philipp. Bot., IV, 1911, Art. 62, p. 1155. — Peritheciis hypophyllis, superficialibus, in greges rotundatos vel irregulares 0,5-2 cm. latos laxe dispositis, 100-200 μ diam., radiatim contextis, planis, tenuissimis, atris, sub microscopio fuligineis et diaphanis, poro minuto centrali apertis; mycelio parce evoluto, radiante, et hyphis irregulariter ramosis 4-6 μ crassis, hyphopodia solitaria bicellularia elongato-ovoidea fusca 20-28 μ longa 10-14 μ lata gerentibus composito; ascis globosis vel subglobosis, 35-55 × 35-42, octosporis, aparaphysatis; sporidiis conglobatis, oblongo-ellipsoideis, utrinque rotundatis, 1-septatis, ad septum valde constrictis, facile in loculos secedentibus (loculis aequalibus vel subaequalibus), diu hyalinis, tandem fuscis, muco hyalino copiose obductis, 21-28 × 12-15. 4876

Hab. in foliis vivis Solani manucaling (Solanaceae), Todaya, Ms. Apo, Distr. Davao. ins. Mindanao in Philipp. (Elmer).

85. **Asterina Büttneriae** Theiss., Gatt. Asterina (1913) p. 99, tab. II fig. 19 et 21, tab. IV fig. 15. — Plagulis tenuibus, nebulosis, indeterminatis, epiphyllis; hyphis subiculi 3-4 μ crassis, gracilibus, subflexuoso-undulatis, fusco-brunneis, opposite vel alterne ramosis; hyphopodiis alternis, flaccido-botuliformibus, 8-12 × 4-5; peritheciis hemisphaericis, 140-170 μ diam., poro centrali primum, dein irregulariter stellatim dehiscentibus, basi brevissime flexuose fimbriatis, ex hyphis 5 μ cr. brunneis contextis; ascis ovatis vel ovato-ellipsoideis, aparaphysatis, octosporis, 35-48 × 30-35, jodo non coerulescentibus; sporidiis brunneis, 23-27 × 9-11, oblongis, leniter constrictis, utrinque rotundatis, episporio verrucosulo, loculo supero paullo latiore. 4877

Hab. in foliis Büttneriae australis (Sterculiaceae), Tubarao, Sancta Catharina et Sao Leopoldo, Rio Grande do Sul in Brasilia.

86. **Asterina indica** Syd. in Sydow et Butl., Ann. Mycol. IX, 1911, p. 390. — Maculis epiphyllis, rotundatis v. irregularibus, 0,3-1 cm. diam., brunneis; hyphis mycelii radiantibus, anastomosantibus, brunneis, 4-7 μ cr., hyphopodia alternantia applanato-globosa v. lobata 9-11 μ lata et 8 μ alta gerentibus; peritheciis paucis in quaque macula, radiatim contextis, 150-200 μ diam., irregulariter dehiscentibus, contextu opaco; ascis ovato-globosis, ovatis usque oblongis v. clavatis, apice valde incrassatis, 43-62 × 30-40, octosporis; sporidiis ellipsoideis, utrinque rotundatis, medio 1-septatis et valde constrictis, ex hyalino brunneis, levibus, 22-26 × 10-13. 4878

Hab. in foliis Symploci sp. (Symplocaceae), Darjeeling, Indiae or. (W. Mc Rae).

87. **Asterina grammocarpa** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 557. — Epiphylla, totum folium plus minus occupans; mycelio ex hyphis undulatis valde anastomosantibus flavo-brunneis 3,5-4,5 μ crassis composito; hyphopodiis alternantibus, bicellularibus, 11-16 × 4-4,5, cellula basali recta v. subrecta, superiore leniter lobata et plerumque plus minus recurvata; thyriotheciis dense gregariis, rotundatis, 90-120 μ diam., brunneis usque obscure brunneis, ex hyphis rectis 3-5-4,5 μ latis crebre septatis (articulis 5-8 μ long.) strato simplici compositis, ambitu leniter fimbriatis; ascis globosis v. subglobosis, octosporis, aparaphysatis, rotundatis, medio 1-septatis et constrictis, brunneis, minute verruculosis (verrucis distincte 4879

lineatim dispositis), 17-22 × 8-9.

Hab. in foliis Symploci sp. (Symplocaceae), Angat, prov. Bulacan, Ins. Philippin. (M. Ramos).

88. **Asterina Camelliae** Syd. et Butl., Ann. Myc. IX, 1911, p. 389, t. XVII fig. 1-3. — Peritheciis epiphyllis, membranaceis, scutatis, ex hyphis radiantibus formatis, stellatim dehiscentibus, 200-300 μ diam., in crustas atras effusas usque 1 cm. latas superficiales dense aggregatis v. confluentibus; ascis paucis, elliptico-obovatis, octosporis (ut videtur), 70 100 × 25-35; sporidiis ellipsoideis, utrinque rotundatis, medio 1-septatis et constrictis, brunneis, 30-33 × 16. 4880

Hab. in foliis Camelliae Theae (Theaceae), Dunmur Dullung, Sibsagar District, Assam, Indiae or. (G. Watt). — Socio adest (parasiticum ?) *Dimerium Wathii.*

89. **Asterina Pipturi** Syd., Ann. Mycol. XIV, 1916, p. 366. — Mycelio epiphyllo, plagulas tenues griseo-atras orbiculares 2-5 mm. latas formante, ex hyphis rectiusculis vel parum flexuosis densiuscule et rectangulariter ramosis septatis 4 μ latis brunneis composito; hyphopodiis raris, dispersis, sessilibus, continuis, plerumque leniter lobulatis, mox latioribus, quam altioribus, mox e contra altioribus quam latioribus, 5-8 μ altis; thyriotheciis in medio macularum congregatis, orbicularibus, 80-100 μ diam., mox late apertis, e singulo strato hypharum olivaceo brunnearum 2,5-3 μ latarum sat crebre septatarum (articulis 5-6 μ longis) fere rectarum, composito, ambitu vix fimbriatis, membrana basali nulla; ascis aparaphysatis, subglobosis vel ovatis, 25-35 × 22-30, octosporis; sporidiis ellipsoideis, utrinque rotundatis, medio leniter constrictis, verruculosis, fuscobrunneis, 18-20 × 7-8, cellulis fere aequalibus. 4881

Hab. in foliis Pipturi arborescentis (Urticaceae), Los Baños, ins. Philipp. (J. J. Mirasol). — *Art. Lawsoniae* affinis.

90. **Asterina pusilla** Syd., Enum. Philipp. Fungi II, in Philipp. Journ. of Sci. VIII (1913) p. 488. — Epiphylla, maculas parum conspicuas, minutas vel confluendo majores et effusas formans; mycelio ex hyphis longiusculis, dilute fuscis, vix vel parce septatis, parum ramosis, 3,5-4,5 μ crassis composito; hyphopodiis continuis, alternis, fere semper 2-3-lobatis (lobis obtusis), usque ad 10 μ longis, saepe latioribus quam altioribus; peritheciis laxe gregariis, minutissimis, 70-80 μ diam., tenuissimis, radiatim strato simplici contextis, e centro ad marginem versus stellatim dehiscentibus, contextu ex hyphis 2-3 μ latis regulariter composito; ascis subglobosis, 20-26 × 17-20, octosporis, aparaphysatis; sporidiis 1-septatis et valde con- 4882

strictis, levibus, fuscis, 16-20 × 7-8.

Hab. in foliis Premnae nauseosae (Verbenaceae) et P. sp., Luzon, Prov. Bataan, ins. Philipp. (GRAFF).

91. **Asterina sphaerotheca** Karst. et Roum.— Syll. IX p. 383 — var. **prodiga** Theiss., Gatt. Asterina, p. 59, tab. II fig. 20, V fig. 14 et VIII fig. 9 (1913). — Subiculo flexuoso-crispo, hyphis irregulariter undulatis et reticulato-anastomosantibus, firmis, 5,5-6,5 μ crassis; hyphopodiis oppositis vel etiam alternis, sessilibus, 8 × 6, obsolete sinuato-lobatis; peritheciis orbicularibus 110-180 μ diam. vel ellipsoideis, 250 × 140, colliculoso-hemisphaericis, poro centrali vel lobis paucis radiatim dehiscentibus, vel rima lineari irregulariter ruptis, ex hyphis brunneis, subtorulosis vel rectis, 4-7 μ cr., firmis (cellulis 8-10 μ longis) contextis, peripherice aetate hyphis laete griseis flexuosis 3,5-4,5 μ cr. longius excurrentibus; ascis globosis vel ovatis, 50-65 × 40-48, tunica crassa jodo lutescenti, octosporis, aparaphysatis, muco parco obvolutis; sporidiis brunneis, constrictis, utrinque rotundatis, 30-36 (interdum-40) × 13-16, episporio tenuissime verruculoso, loculo supero plerumque parum latiore. — Conidiis (*Asterostomellae*) brunneolis, ovatis vel ellipsoideis, rectis vel subcurvulis, 18-25 × 11-13, medio hyalino-cinctis continuis. 4883

Hab. in foliis lianae cujusdam, Sao Leopoldo, Rio Grande do Sul, in Brasilia.

92. **Asterina subinermis** Syd. in Leaflets of Philipp. Bot. VI (1913) p. 1927. — Mycelio hypophyllo, rarius et tunc parce etiam in epiphyllo evoluto, late effuso, vix maculiformi, ex hyphis longiusculis, ramosis, fuscis, vix vel remote septatis, 4-5 μ crassis composito; hyphopodiis rarissimis, continuis, subglobosis, ovatis vel irregularibus et tunc saepe parum lobatis, alternis vel subinde etiam oppositis, fuscis, 9-10 × 6-8; peritheciis aggregatis, ambitu circularibus, 175-220 μ diam., stellatim dehiscentibus, amoene radiatim strato simplici contextis, contextu fusco ex hyphis 2-3 μ latis composito, ambitu hyphis flexuosis, radiantibus, 30-60 × 2,5-4 cinctis; ascis globosis vel subglobosis, octosporis, 42-55 × 35-45, aparaphysatis; sporidiis oblongis, medio 1-septatis, vix vel parum constrictis, utrinque late rotundatis, ex hyalino fuscis, verruculosis, 32-37 × 14-16, loculis aequalibus vel fere aequalibus. 4884

Hab. in foliis vetustis fruticis cujusdam, Cabadbaran, Mindanao, ins. Philipp.

93. **Asterina tayabensis** H. S. Yates, Philipp. Journ. Sc. XII (1917) p. 372. — Plagulis epiphyllis, atris, primo orbicularibus 3-4 mm. diam., 4885

mox confluentibus et magnam partem folii obtegentibus; mycelio abundante, ex hyphis brunneis septatis anastomosantibus ramosis irregularibus 4-6 μ latis composito; hyphopodiis paucis dispersis, irregulariter distributis, breviter cylindraceis, rotundatis, 10-12 μ longis, 5-7 μ latis; peritheciis numerosis, globosis 130-200 μ diam., tenuibus, stellatim dehiscentibus, radiatim contextis ex hyphis 2-6 μ cr.; ascis subglobosis, octosporis, 25 × 30, paraphysatis; sporidiis oblongis, utrinque rotundatis, medio 1-septatis, constrictis, echinatis, 22 μ longis, 10 μ latis.

Hab. in foliis plantae ignotae, Basiad, Tayabas Luzon, Ins. Philipp.

94. **Asterina distincta** Berk. in Herb. Kew, in Theissen Ann. Mycol. X, 1912, p. 190. — Nomen nudum. 4886

WARDINA G. Arnaud, Ann. École Nat. Agricult. Montpellier, t. 16., 1918, p. 165 (Etym. a Cl. MARSHALL WARD). — Stromata ut in *Asterina* sed mycelio externo stigmocystis intercalaribus inflatis gerente.— Huc ducenda est sec. Auct. *Asterina* (Asterula) *myocoproides* Sacc. et Berl. 4887

ASTEROLIBERTIA G. Arnaud, Ann. École Nat. Agricult. Montpellier, t. 16., 1918, p. 165 (Etym. a Domin. LIBERT). — Tab. XXXI. — Stromata *Dimerosporii* Fuck.; mycelio stigmopodiis destituto sed stigmocystis intercalaribus nodulosis donato. — Huc pertinet sec. Auct. *Asterina Couepiniae* P. Henn. (= A. globulifera Pat.). 4888

HALBANINA G. Arnaud, Ann. École Nat. Agricult. Montpellier t. 16., 1918, p. 163 (ad interim). (Etym. a gen. *Halbania* Rac. cui prox.).— Stromata ut in *Dimerosporio* Fuck.; a gen. *Halbania* sporidiis uniseptatis nec triseptatis differt.

1. **Halbanina irregularis** (Syd.) G. Arnaud, l. c., *Asterina irr.* Syd. in Leaflets of Philipp. Bot. V (1912) p. 1540. — Mycelio hypophyllo, eximie radiante, praecipue ad marginem, plagulas atras discoidales vel irregulares 0,5-1 cm. longas efformante, tenui, ex hyphis dense ramosis anastomosantibusque, obscure brunneis, septatis, 5-6 μ crassis composito; hyphopodiis paucis alternantibus, 10-14 × 6-8; peritheciis late dispositis, rotundatis vel saepius elongatis, subinde etiam trigonis, lembosioideis, 200-300 μ diam. vel usque ad 750 μ elongatis, rima angusta quasi hysterioidea dehiscentibus, ambitu hyphis radiantibus cinctis, contextu obscure brunneo opaco; ascis ovato-globosis, 55-75 × 50-65, octosporis; sporidiis ellipsoideis, utrinque late 4889

rotundatis, medio septatis et valde constrictis, ubique verrucosis, ex hyalino brunneis, 32-36 × 15-16.

Hab. in foliis vetustis Vaticae obtusifoliae (Dipterocarpaceae), Puerto Princesa, Palawan, ins. Philipp.

BALANSINA G. Arnaud, Ann. École Nat. Agricult. Montpellier, t. 16., 1918, p. 123. — Stroma ascigerum centrale stellatum, cum mycelio interno pluribus locis connexum; mycelium externum, ex hyphis ramosis stigmatocystis distinctis destitutis; asci ovoidei, oblongi, erecti, contextu paraphysoideo circumdati; sporidia bilocularia, brunnea.

1. **Balansina stellata** G. Arnaud, l. c. p. 124, tab. XII.— Maculis 1-2,5 mm. latis, stromatibus paucis unilocularibus 0,5-1 mm. long.; ascis ovoideis oblongis, ventricosis, octosporis; sporidiis bilocularibus, brunneis, 20-20,5 × 9-10, loculis longitudine subaequalibus, superiore tantum latiore. Mycelio externo brunneo ramoso, interno subcuticulari, hyalino. 4890

Hab. in foliis Myrsineae cujusdam, Caaguazu, America austr. (J. B. Balansa).

TRICHASTERINA G. Arnaud, Ann. École Nat. Agricult. Montpellier, t. 16., 1918, p. 172 (Etym. e mycelio setuloso). — Est *Asterina* mycelio setuloso praedita.

1. **Trichasterina Styracis** (Th.) G. Arnaud. l. c., *Asterina Styracis* Theiss., Gatt. Asterina, p. 41 tab. III fig. 6 et VII fig. 26-27 (1913). — *A. silvatica* Theiss. Dec. Fung. bras. 77, non Speg.; *A. silvatica* Rehm in Rick, Fungi austro-amer. 386 non Speg. — Plagulis epiphyllis, 0,5-1 cm. latis, confluentibus, aggregatis; hyphis subiculi 6-8 μ crassis, obscure brunneis, laxe septatis, hyphopodiis subglobosocapitatis, alternis, 7-9 μ latis, integris, sessilibus; peritheciis 230-300 μ diam., late hemisphaericis, stellatim dehiscentibus, basi hyphis rectis crebris in mycelium excurrentibus, opace ex hyphis brunneis 4-5 μ cr. usque ad centrum egregie dentato-serratis contextis; ascis globosis vel ovatis, 70-90 × 45-60, octosporis, sessilibus, jodi ope non coerulescentibus, paraphysibus firmis, 2,5-4 μ crassis, griseo-hyalinis, septatis obvallantibus; sporidiis ellipsoideis, brunneis, vix constrictis, utrinque rotundatis, 30-35 × 16-19, cellulis subaequalibus. 4891

Hab. in foliis vivis Styracis acuminatae (Styracaceae), Sao Leopoldo, Rio Grande do Sul, Brasilia.

PARASTERINA Theiss. et Syd., Ann. Mycol. XV, 1917, p. 246 et p. 420. — Est *Asterina* paraphysibus donata.

1. **Parasterina Ramosii** Syd., Ann. Mycol. XV, 1917, p. 246. — Epi- 4892
phylla, plagulas primitus orbiculares minutas sed mox confluendo majores et irregulares formans; mycelium ex hyphis rectangulariter ramosis septatis (articulis 14-30 μ longis) castaneo-brunneis 5-7 μ crassis compositum; hyphopodia sat numerosa, typice (sed inconstanter) opposita, bicellularia, 12-18 × 6-8, crasse cylindracea, recta, integra, cellula basali minuta; thyriothecia densiuscule disposita, primitus rotundata, 200-300 μ diam., dein elliptica et usque 600 μ longa, 200-250 μ lata, hemisphaerica, crustose fimbriata, radiatim contexta, opaca, stellatim dehiscentia; asci elliptici vel ovati, 50-80 × 35-48, octospori, paraphysati; sporae ellipticae vel oblongo-ellipticae, medio septatae et parum constrictae, in maturitate atrae, opacae, 25-30 × 12-14.

Hab. in foliis Eugeniae sp. (Myrtaceae), Rizal, Luzon, Ins. Philipp. (M. Ramos).

DIMEROSPORIUM Fuck. — Syll. I p. 51, IX p. 401, XI p. 257, XIV p. 466, XVI p. 408, XVII p. 533, XXII p. 33.

1. **Dimerosporium Triumfettae** Arnaud, Ann. École Nat. Agricult. Mont- 4893
pellier, t. 16., 1918, p. 180, tab. 36. — Maublanc A., Bull. Soc. Mycol. de Fr. t. 36., 1920, p. 39, fig. 7-9. — Maculis epiphyllis, 2-3 mm. diam., numerosis; hyphis ramosis, septatis, sat pallide brunneis, 4 μ crassis; hyphopodiis globosis v. piriformibus, sessilibus, 5-7 μ diam.; peritheciis minutis, 60-100 μ diam., primum depresso-clypeatis, distincte radiatis, dein hemisphaericis, gelatinosis; ascis globosis vel late ovoideis, sessilibus, 30-40 μ diam., aparaphysatis; sporidiis octonis conglobatis, brunneis, ovoideis v. subpiriformibus, 1-septatis, constrictis, loculo inferiore saepe paulo angustiore, 18-23 × 10-12, episporio minute granuloso.

Hab. in foliis vivis Triumfettae sp. (Tiliaceae), Rio de Janeiro, Brasilia.

QUESTIERIA G. Arnaud, Ann. École Nat. Agricult. Montpellier, t. 16., 4894
1918, p. 186, tab. XL, XLI (Etym. a Questier nom. prop.). — A *Dimerosporio* praecipue differt parietibus stromatis demum gelatinosis. — Sec. Auct., huc pertinent ut subgenera:

Eu-Questieria Arnaud l. c., stromatibus omnino gelatinosis subanhystis. — Typus *Questieria pulchra* (Sacc. in *Dimerosporio*) Arnaud.

Balladynopsis Arnaud l. c., stromatibus parietibus brunneis contextu vix distincto praeditis. — Typus *Questieria monotheca* (Patouill. et Gaill. in *Asterina*) Arnaud.

ASTERINELLA Theiss., Brot. Ser. Bot. X (1912) p. 165. — (Etym. ab affini Asterina). — A gen. *Asterina* distinguitur mycelio hyphopodiis destituto.

1. **Asterinella venusta** Sydow, Ann. Mycol. 18., 1920, p. 101. — Plagulas amphigenas tenuissimas orbiculares minutas 1-3 mm. diam. formans; mycelium ex hyphis radiantibus obscure fuscis subrectis vel leniter undulatis rectangulariter ramosis 3-4 μ crassis haud hyphopodiatis septatis formatum: thyriothecia copiosa, gregaria orbicularia vel elliptica, 60-100 × 50-70. radiatim ex hyphis rectis crebre septatis (articulis 3-5 μ longis) 3-3,5 μ latis obscure fuscis contexta, ad ambitum non vel parce fimbriata; asci aparaphysati, 20-30 × 20, 8-spori; sporae oblongae, ad apicem rotundatae, basim versus leniter attenuatae, supra medium constrictae, circiter 15-20 × 5-6 (nondum perfecte maturae). 4895

Hab. in foliis Anaxagoreae luzonensis (Anonaceae), Mt. Maquiling, prov. Laguna, Ins. Philippin. (C. Collado).

2. **Asterinella obesa** Syd., Enum. Philipp. Fungi II, in Philipp. Journ. of Sci. VIII (1913) p. 490. — Epiphylla, maculas atras, laxas, rotundatas, 2-8 mm. diam. efformans; mycelio laxo, ex hyphis longis, parce ramosis, remote septatis obscure brunneis, crassis, 6-10 μ latis composito; hyphopodiis nullis; peritheciis laxe aggregatis, fere semper elongatis, 250-400 × 125-200, rarius rotundatis, centro elevatis, rima longitudinali apertis, aterrimis, amoene radiatim contextis, contextu opace olivaceo-atro ex hyphis 3,5-4,5 μ latis composito, ambitu hyphis numerosis crassis 5-8 μ latis obscure olivaceo-brunneis fimbriatis; ascis globosis, subglobosis vel ovatis, aparaphysatis, 50-60 × 40-52; sporidiis conglobatis, ellipsoideis vel ellipsoideo-oblongis, ex hyalino obscure olivaceo-brunneis, levibus, 32-38 × 16-20, loculo superiore maximo, inferiore minimo, 7-10 μ tantum longo et omnino appendiculiformi saepe dilutiore. 4896

Hab. in foliis Canarii villosi (Burseraceae), Luzon, Prov. Nueva Vizcaya, ins. Philipp. (Mc. Gregor). — Hyphis crassis et sporidiis inaequiloculis praecipue facileque distincta.

3. **Asterinella Santiriae** Syd., Ann. Mycol. XV, 1917, p. 248. — Amphigena, plerumque epiphylla, plagulas irregulares usque 1 cm. diam. formans; mycelium ex hyphis rectangulariter laxeque ramo- 4897

sis plerumque rectis 6-9 μ crassis septatis compositum, hyphopodiis destitutum, sed una alterave cellula subnodose incrassata (usque 11 μ crassa); thyriotecia laxe gregaria, rotundata, 300-350 μ diam. vel elliptica usque 400 × 250-300, ambitu fimbriata, radiatim ex hyphis 4 μ crassis rectis contexta, obscure castaneo-brunnea, subopaca; asci ovato-globosi, aparaphysati, 50-75 × 45-60, octospori; sporae oblongo-ellipsoideae, utrinque rotundatae, inaequaliter septatae, cellula superiore duplo majore, brunneae, leves, 32-36 × 17-19.

Hab. in foliis Santiriae nitidae (Burseraceae), pr. Paete, Laguna, Ins. Philipp. (C. F. Baker).

4. **Asterinella Dipterocarpi** H. et P. Sydow, Ann. Mycol. XII, 1914, 4898
p. 558. — Amphigena, plerumque epiphylla, maculas 2-10 mm. diam. efformans; mycelio laxo ex hyphis crassis ramosis opace fuscis 6-8 μ latis hyphopodiis destitutis composito; thyriotheciis laxe aggregatis, rotundatis et 140-200 μ diam. v. elongatis et usque 400 μ longis, atris, contextu amoene radiato ex hyphis rectis fuscis 4-6 μ crassis septatis (articulis 10-15 μ long.) composito; ascis ovato-globosis, octosporis, aparaphysatis, 55-70 × 35-45; sporidiis conglobatis, oblongis, infra medium 1-septatis, ex hyalino brunneis, utrinque rotundatis, non constrictis, levibus, 24-28 × 8-10.

Hab. in foliis Dipterocarpi verniciflui (Dipterocarpaceae), Angat prov. Bulacan, Ins. Philippin. (M. Ramos). — A *Morenoella Dipterocarpi* (P. Henn.) Theiss. omnino diversa.

5. **Asterinella luzonensis** Syd., Enum. Philipp. Fungi II, in Philipp. 9899
Journ. of Sci. VIII (1913) p. 491. — Mycelio hypophyllo, plerumque parcissimo, vix visibili, ex hyphis longiusculis, flexuosis, anastomosantibus, fusco-brunneis, 3,5-5 μ crassis, septatis (articulis 16-22 μ longis), levibus composito; hyphopodiis nullis; peritheciis plerumque in greges 0,5-1 cm. latos laxissime dispositis, inversis, variabilibus, ambitu aut rotundatis aut irregularibus usque valde elongatis, 150-200 μ diam. vel usque ad 800 × 170, strato simplici ex hyphis rectis fusco-brunneis 3,5-4 μ cr. contextis, poro centrali vel rima longitudinali dehiscentibus; ascis globosis vel subglobosis, 50-62 × 40-52, octosporis, aparaphysatis; sporidiis oblongis, utrinque rotundatis, medio 1-septatis, vix vel leniter constrictis, levibus, tandem brunneis, 29-33 × 13-15.

Hab. in foliis Shoreae polyspermae (Dipterocarpaceae), Luzon, Prov. Bataan, ins. Philipp. (Graff). — Affinis *A. Humiriae* (P. Henn.) Theiss., a qua praecipue peritheciis majoribus plerumque elongatis differt.

6. **Asterinella Elaeagni** Sydow, Ann. Mycol. 18., 1920, p. 101. — Epi- 4900
phylla, plagulas orbiculares 2-4 mm. diam. atras formans; mycelium sat ramosum, anastomosans, ex hyphis undulato-tortuosis fuscis ca. 3 μ crassis compositum, haud hyphopodiatum; thyriothecia gregaria, orbicularia vel elliptica, 90-150 × 70-100, opace contexta; asci ovati, 25-35 × 25-30, 8-spori, ut videtur aparaphysati; sporae oblongae, utrinque rotundatae, fuscae, leves, medio septatae, parum constrictae, 18-20 × 7-8, loculis fere aequalibus.

Hab. in foliis Elaeagni philippinensis (Elaeagnaceae), Mt. Maquiling, prov. Laguna Ins. Philippin. (C. Collado).

7. **Asterinella ramuligera** Syd., Philipp. Journ. of Sc., Bot., IX, 1914, 4901
p. 182. — Amphigena, plagulas griseo-atras mediocres vel majusculas 0,5-3 cm. latas irregulares formans; mycelio laxiusculo, ex hyphis longis fuscis 6-8 μ crassis remote septatis ramosis haud hyphopodiatis, sed cum ramulis novellis copiosis, 20-30 μ longis ad apicem lobatis et hyphopodia erecta simulantibus, obsitis composito; peritheciis sparsis ambitu orbicularibus, inversis, 140-200 μ diam., non vel parum fimbriatis, stellatim dehiscentibus, contextu obscure brunneo, ex hyphis ca. 3 μ crassis crebre septatis (articulis 7-10 μ longis) composito; ascis globulosis vel ovatis, aparaphysatis, tenuiter tunicatis, 35-47 μ longis, 30-40 μ latis, octosporis, sporidiis oblongis, utrinque late rotundatis, medio 1-septatis et constrictis, ubique verrucosis, ex hyalino fuscis, 20-26 × 10-12.

Hab. in foliis vivis Microdesmidis casearifoliae (Euphorbiaceae), Talawan Taytay, Ins. Philipp. (Merrill).

8. **Asterinella Hydnocarpi** H. S. Yates, Philipp. Journ. Sc. XII (1917) 4902
p. 372 (corr. *Asterinella Hydnocarpiae*). — Epiphylla, maculas irregulares, 5-8 mm. diam., v. confluentes et superficiem foliorum plus minusve obtegentes efformante; mycelio laxo ex hyphis radiantibus 8 μ cr. brunneis composito, ramis irregularibus; hyphopodiis nullis; peritheciis numerosis in quaque macula, rotundatis et 300-400 μ diam., obscure brunneis, subopacis, contextu radiato, ex hyphis rectis brunneis 5 μ diam. composito, ambitu fimbriatis, poro centrali dehiscentibus; ascis globosis, 70 μ diam., octosporis, paraphysatis, sporidiis oblongo-ovoideis, medio 1-septatis, constrictis, fuscis, loculo supero parum latiore, 40-50 × 25-28.

Hab. in foliis Hydnocarpi falcati (Flacourtiaceae), Catubing River, Samar, Ins. Philipp.

9. **Asterinella gracilis** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 4903
559. — Hypophylla, pro ratione saepe aegre conspicua, plagulas

effusas griseo-brunneas tenues formans; mycelio ex hyphis valde anastomosantibus ramosis flavo-fuscis tenuibus 2,5-4 μ crassis remote septatis saepe leniter noduloso-tortuosis composito; hyphopodiis nullis; thyriotheciis dense sparsis ambitu rotundatis, 90-140 μ diam. v. elongatis tunc 180-230 μ long. et 70-90 μ latis, strato simplici ex hyphis 3-4 μ crassis crebre septatis (articulis 5-8 μ longis) flavo-fuscis rectis v. fere rectis compositis, mox valde apertis, ad marginem non v. parum fimbriatis, membrana basali nulla; ascis ovato-globosis, 20-28 × 18-22, paraphysatis, octosporis; sporidiis ovato-oblongis, utrinque obtusis, levibus, ex hyalino fuscidulis, 18-20 × 7-8, loculo supero parum latiore.

Hab. in foliis Derridis diadelphae (Leguminosae), Sampaloc prov. Bulacan, Ins. Philipp. (M. Ramos). — Ab *Asterina Derridis* P. Henn. omnino diversa. Potius *Ast. trachycarpae* Syd. proxima a qua differt sporidiis minoribus.

10. **Asterinella Loranthi** Syd., Enum. Philipp. Fungi II, in Philipp. 4904
Journ. of Sci. VIII (1913) p. 490. — Hypophylla, maculas atras irregulares plus minusve longas efformans, saepe totam folii superficiem occupans; mycelio parcissimo ex hyphis anastomosantibus parcissime septatis, flavo-brunneis vel brunneis, 4-6 μ cr. composito; hyphopodiis nullis; peritheciis laxe aggregatis, rotundatis, 140-180 μ diam., subcarbonaceis, stellatim dehiscentibus et mox late apertis, atris, contextu radiato, olivaceo-fusco, ex hyphis breviter articulatis (articulis 6-8 × 2,5-4) strato simplici composito; ascis e globoso ovatis, 45-60 × 32-45, octosporis; sporidiis ellipsoideo-oblongis, utrinque late rotundatis, medio 1-septatis et valde constrictis, loculis facile secedentibus, mox fusco-atris, tota superficie verrucosis, 26 34 × 14-16; pycnidiosporis simul praesentibus, continuis, subglobosis vel ovatis, fuscis, 18-22 × 13-15.

Hab. in foliis vivis Loranthi leytensis (Loranthaceae), Leyte, Dagami, ins. Philipp. (Ramos). — Sporidia matura intense atra; asci interdum, ut videtur, 4-6-spori.

11. **Asterinella Anamirtae** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 4905
558. — Hypophylla, plagulas irregulares tandem confluentes effusas tenerrimas formans; mycelio ex hyphis dilute fuscis 3,5-4 μ crassis flexuosis undulatis longe articulatis anastomosantibus formato; hyphopodiis nullis (passim autem oriuntur hinc inde ramuli myceliales hyphopodia simulantes); thryiotheciis gregariis, applanatis, 80-100 μ diam., mox late apertis, griseo-brunneis, ex hyphis rectis 3-4 μ crassis crebre septatis (articulis 5-7 μ longis) strato simplici

radiatim contextis, peripherice hyphis singulis fimbriatis, membrana basali distincta praeditis; ascis ad summas hyphas hyalinas vel subhyalinas oriundis, primo globoso-ovatis, 35-45 μ diam., dein piriformibus 50-60 × 35-40, aparaphysatis, octosporis; sporidiis conglobatis, e staneo-brunneis, medio 1-septatis et valde constrictis, 22-25 μ longis, 9-11 μ latis, grossiuscule verrucosis, loculo supero paullo subinde majore; thyriothecciis conidiigeris similibus; conidiis subglobosis usque ovatis, continuis castaneo-brunneis, 12-16 μ longis, 11-13 μ latis.

Hab. in foliis Anamirtae cocculi (Menispermaceae), Angat prov. Bulacan, Ins. Philippin. (M. Ramos). — *Aster. diaphanae* (Syd.) Theiss. proxima sed omnibus partibus minori.

12. **Asterinella amazonica** Syd., Ann. Mycol. XIV, 1916, p. 92. — Hy- 4906
pophylla, plagulas parum perspicuas 1-2 cm. latas formans; mycelio laxo, ex hyphis irregulariter opposite vel alterne ramosis anastomosantibus saepe etiam lateraliter connexis fuscis 5-7 μ crassis flexuosis remote septatis composito; hyphopodiis nullis, thyriothecciis paucis in quaque plagula, inversis, hemisphaerico-lenticularibus, ambitu orbicularibus 100-160 μ diam., vel elongatis et tunc usque 250 μ longis 80-120 μ latis, vertice irregulariter dehiscentibus, ambitu breviter fimbriatis ex hyphis flexuosis fuscis creberrime septatis (articulis 5-7 μ longis 3 μ crassis) composito; ascis subglobosis usque ovatis, aparaphysatis, 32-40 × 20-35, octosporis; sporidiis ellipsoideo-oblongis, utrinque rotundatis, medio 1-septatis et constrictis, levibus, flavis, 20-24 × 9-11.

Hab. in foliis Ramisiae amazonicae (Nyctaginaceae), Manaos, Rio Negro, Brasilia (E. Ule).

13. **Asterinella Calami** Syd., Philipp. Journ. of Sc., Bot., IX, 1914, p. 4907
182. — Hypophylla, irregulariter distributa, magnam folii partem occupans; mycelio perparco, ex hyphis fuscis, parce ramosis septatis (articulis 10-12 μ longis), 3-5 μ latis rectiusculis composito; hyphopodiis nullis; peritheciis inversis, irregulariter sparsis, planis, ambitu irregulariter rotundatis 250-420 μ diam., contextu ex hyphis toruloso-flexuosis copiose anastomosantibus fuscis 3-4 μ crassis composito, centro subatro opaco; ascis ovato-globosis, paucis tantum visis; sporidiis ellipsoideo-oblongis, utrinque rotundatis, medio 1-septatis et constrictis, levibus, obscure brunneis, 34-35 × 15-17.

Hab. in foliis vivis Calami sp. (Palmae), Palawan, Mount Capoas, Ins. Philipp. (Merrill).

14. **Asterinella lugubris** Syd., Enum. Philipp. Fungi II, in Philipp. 4908

Journ. of Sci. VIII (1913) p. 491. — Mycelio epiphyllo, tenui, plus minusve effuso, parce maculiformi, ex hyphis laxe intertextis, 3-5 μ cr., fuscis, longiusculis, ramosis, non vel parce septatis composito; hyphopodiis nullis; peritheciis sparsis, variabilibus aut rotundatis, 100-140 μ diam., aut valde elongatis, usque ad 600 × 70-120, subinde etiam triangularibus, ambitu hyphis radiantibus cinctis, stellatim vel rima longitudinali dehiscentibus, pluristratosis, contextu atro, opaco; ascis ovatis vel oblongis, sessilibus, 35-50 × 24-26, octosporis; paraphysibus numerosis, distinctis, ramosis, hyalinis, ad apicem lenissime incrassatis; sporidiis oblongis, utrinque rotundatis, medio 1-septatis, valde constrictis, levibus, tandem fuscis, 18-24 × 8-9.

Hab. in foliis Ixorae philippinensis (Rubiaceae), Luzon, Manila, ins. Philipp. (MERRILL).

15. **Asterinella distinguenda** Syd., Enum. Philipp. Fungi II, in Philipp. 4909
Journ. of Sci. VIII (1913) p. 492. — Mycelio amphigeno, tenui, plus minusve effuso, parce maculiformi, ex hyphis laxe intertextis, 3-5 μ cr., fuscis, longiusculis, ramosis, anastomosantibus, parce septatis composito; hyphopodiis nullis; peritheciis aggregatis, irregularibus, plerumque ellipticis vel oblongis, rarius rotundatis, 150-225 × 100-170, ambitu hyphis radiantibus cinctis, stellatim vel rima longitudinali dehiscentibus, tandem plus minusve late apertis, pluristratosis, contextu atro opaco; ascis e globoso ovatis, sessilibus, 20-35 × 15-19, octosporis, aparaphysatis; sporidiis conglobatis, ovato-oblongis, medio 1-septatis et leniter constrictis, ex hyalino olivaceo-fuscis, levibus, 12-14 × 5,5-6,5, loculo superiore plerumque latiore; pycnidiis simul praesentibus peritheciis simillimis, sporulis subrectis vel falcatis, continuis, hyalinis, 15-18 × 1-1,5, sporophoris brevissimis, 4-6 μ longis fultis.

Hab. in foliis Ixorae philippinensis (Rubiaceae), Luzon, Manila, ins. Philipp. (MERRILL). — Habitu *A. lugubri* Syd. subsimili sed notis variis distincta.

16. **Asterinella palawanensis** Syd., Philipp. Journ. of Sc., Bot., IX, 1914, 4910
p. 182. — Plagulas hypophyllas atras 0,5-1,5 cm. diam., orbiculares formans; mycelio ex hyphis tenuibus 3-5 μ crassis dilute fuscis parce septatis, sed copiose anastomosantibus et saepe lateraliter conjunctis flexuosis composito, hyphopodiis nullis; peritheciis sparsis, rotundatis, applanato-convexis, atris, opacis, 200-350 μ diam., ad ambitum fimbriatis, contextu opaco; ascis ovatis vel oblongis, brevissime stipitatis, 45-55 μ longis, 24-34 μ latis octosporis; pa-

raphysibus numerosis, ascos superantibus, 1 μ crassis; sporidiis distichis, oblongis, utrinque rotundatis, medio 1-septatis et constrictis, levibus, ex hyalino fuscis, 18-24 × 7-8,5.

Hab. in foliis Plectroniae sp. (Rubiaceae), (socia *Balladyna velutina*), Palawan, Taytay, Ins. Philipp. (MERRILL).

17. **Asterinella creberrima** Syd., Ann. Mycol. XV, 1917, p. 247. — Hy- 4911
pophylla, effusa, totam fere folii superficiem occupans; mycelium ex hyphis fuscidulis 2,5-3,5 μ latis flexuosis longe articulatis ramosis formatum; hyphopodia desunt; thyriothecia creberrime stipata, orbicularia, 70-120 μ diam., e strato simplici hypharum rectarum ca. 2,5 μ latarum crebre septatarum fuscidularum radiatim contexta, per aetatem late aperta, peripherice hyphis longiusculis flexuosis fimbriata; asci ovato-globosi, distincte paraphysati, 35-40 × 30-35, octospori; J +; sporae oblongae, medio vel circa medium septatae et valde constrictae, loculis fere aequalibus, vel supero parum majore, brunneae, leves, 24-26 × 12-13; conidia ovata vel ovato-globosa, continua, obscure castanea, 16-19 × 14-16.

Hab. in foliis Premnae sp. (Verbenaceae), Los Baños, Laguna, Ins. Philipp. (C. F. BAKER).

18. **Asterinella saginata** Syd., Ann. Mycol. XV, 1917, p. 248. — Pla- 4912
gulas hypophyllas indeterminatas saepe confluentes effusas usque 2 cm. longas (vel ultra?) formans; mycelium ex hyphis anastomosantibus ramosis 6-8 μ crassis rectiusculis vel flexuosis subinde torulosis obscure brunneis remote septatis haud hyphopodiatis compositum; thyriothecia gregaria, rotundata, 300-500 μ diam.; opaca, subatra, radiatim ex hyphis 3,5-4,5 μ crassis composita, stellatim dehiscentia, ambitu hyphis similibus plus minus longe fimbriata; asci ovati, aparaphysati, 60-80 × 40-60, octospori; sporae-oblongo-ellipsoideae, utrinque rotundatae, medio septatae, constrictae, leves, fuscae, 40-44 × 20-23.

Hab. in foliis Pinangae sp. (?), Bulusan Volcano, Sorsogon (M. RAMOS) et Pinangae Elmeri, Benguet, Ins. Philipp. (E. D. MERRILL).

19. **Asterinella Gmelinae** Sacc., Notae Myc. XX, Nuovo Giorn. Bot. it. 4913
23., 1916, p. 199 (etiam sub *Asterina*). – Plagulis amphigenis, irregulariter subcircularibus 3-5 mm. lat., dilute fuligineis, laxe reticulatis; hyphis non hyphopodiatis, e perithecio radiatim divergentibus, ramulis brevibus oppositis v. alternis, sursum versis et leviter curvis utrinque acutis; peritheciis applanato-dimidiatis 160 μ diam. radiatim contextis, margine vix fimbriatis, brunneis; ascis

sphaeroideo-ellipticis 60-80 μ diam., v. 80 × 65, suboctosporis; sporidiis tristichis, obovato-oblongis, utrinque rotundatis, levibus, 38 × 14-16, demum 35 × 18-19, atro-fuligineis, loculo superiore paullo crassiore.

Hab. in foliis languidis, Gmelinae sp. (Verbenaceae), Los Baños, ins. Philipp. — *Aster. Humiriae* (P. Henn.) Theiss. proxima.

20. **Asterinella quinta** (Rac.) Theiss., Broteria, Ser. Bot. X (1912) p. 105 1914
c. icon., *Asterinella quinta* Rac. in herb., Java.— Mycelio parco evanido ex hyphis tenerrimis, laete veridulo-fuscis laxe ramosis 2,5 μ cr. formato; hyphopodiis nullis; peritheciis sparsis, 100-140 μ diam. orbicularibus, applanato-scutatis, contextu viridulo-fusco, ex hyphis 4 μ cr., rectiusculis, subtorulosis, centro obscurioribus, peripheriam versus griseo-fuligineis, articulis 6-8 μ longis versus centrum brevioribus fere cubicis, 5 μ long. radiato-contextis, vix fimbriatis; ascis ovato-globosis 35-45 μ diam. v. 50-60 × 35-40, aparaphysatis, ex summis hyphis hyalinis flexuosis oriundis, 8-sporis, jodi ope nulla; sporidiis conglobatis oblongis, fuligineo-brunneis, membrana atra levi, 22-27 × 10-12, cellula sup. latiore.

Hab. (matrix et locus omissi), in Java. — Ab affine *A. Cryptocaryae* mycelio recedit.

21. **Asterinella lepidotricha** Theiss., Ann. Mycol. XIV, 1916, p. 271. — 4915
Epiphylla, soris minutis dense irregulariterque sparsis; hyphis mycelialibus delicatulis, vix 2,5 μ crassis, absque hyphopodiis, laxe reticulato-ramosis, rectiusculis, nusquam dense contextis. Thyriotheciis orbicularibus, planis, scutatis, 100-130 μ diam., ex hyphis fusco-brunneolis, angustissimis (2-3 μ cr.), peripheriam versus subcrenulatis radiato-contextis. Ascis ovato-ellipticis, aparaphysatis, 45-50 × 30-33, brevissime stipitatis, octosporis. Sporis conglobatis, brunneis, medio septatis et constrictis, 16-17 μ longis, cellula superiore 8 μ, inferiore 6,5 μ latis. Thyriothecia conidiifera ascigeris similia, minora, 55-70 μ diam.; conidiis brunneis, piriformibus, continuis, 19-23 × 12-14 (Asterostomula lepidotricha Theis. n. sp.).

Hab. in foliis indeterminatis, Los Baños ins. Philippinensium (S. R. Reyes, comm. Backer).

PRILLIEUXINA G. Arnaud, Ann. Ecole Nat. Agricult. Montpellier, t. 16., 4916
1918, p. 161 (etym. a Cl. Ed. Prillieux). — Tab. XXIX. — Stromata ut in *Dimerosporio* Fuck.; mycelio externo stigmopodiis distinctis destituto ut in *Asterinella;* mycelio interno stromatibus tanctum nec mycelio externo connexo. — Huc ducenda est secund.

Auctor *Asterinella Winteriana* Pazschke. Status conidicus *Prillieuxinae Winterianae* sistit *Leprieurina Winteriana.*

HARIOTULA G. Arnaud, C. R. Ac. Sc. Paris t. 164., 1917, p. 888; Ann. 4917
École Nat. Agr. Montpellier, t. 16., 1918, p. 201, tab. XLIV. — (Etym. a cl. mycol. HARIOT). — Est *Asterinella* rhizomatica, idest mycelio communi incluso praedita. — Species typica *Har. Loranthi* (Karst. et Har., ut *Clypeolum*) Arnaud.

OPASTERINELLA Spegaz., Rel. Myc. trop. in Bol. Ac. Nac. Cienc. Cordoba, t. XXIII, 1919, Extr. p. 136. — Caracteres ex tabula synoptica p. 436 relata.

1. **Opasterinella Tonduzi** Spegaz., Fungi Costaric. nonn., in Bol. Ac. 4918
Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 209. — Maculae nullae v. vix pallescentes indeterminatae; subiculum amphigenum arachnoideum tenue laxum, ex hyphis rectiusculis alterne ramosis parce septatis, hyphopodiis nodulisque plane destitutis, efformatum; thyriothecia parva 80-100 μ diam. atra glabra, astoma, stellatim dehiscentia, margine crenulata ac fimbriatula, membrana basali destituta, hyphis tenuibus radiantibus vix undulatis composita; asci subglobosi aparaphysati 40-45 × 40; sporae laeves didymae, loculis subaequalibus, fuligineae, 20-24 × 10-12.

Hab. in foliis Xylosmatis Salzmanni (Flacourtiaceae), prope Carthaginem Costarica, America trop.

MAUBLANCIA Arnaud, Ann. Ecole Nat. Agricult. Montpellier, t. 16., 1918, p. 158. — Maublanc, Bull. Soc. Mycol. de Fr. t. 36., 1920, p. 39. — Perithecia, asci et sporidia ut in genere *Asterinella* Theiss. (emend. Arnaud), sed mycelium hyphopodia gerens.

1. **Maublancia Myrtacearum** Arnaud, l. c., tab. 28. — Maublanc A., l. c. p. 4919
39 fig. 3-6. — Maculis epiphyllis, orbicularibus, diffusis, 3-6 mm. diam. Hyphis brunneis, 4-6 μ crassis, crasse tunicatis, ramosis, paulum undulatis, fragilibus; hyphopodiis numerosis, bicellularibus, cellula infer. pedicelliformi, simplic v. lobata, super. lobata, 15-20 × 12-16. Peritheciis atris, sparsis, orbicularibus, 300-450 μ diam., tunica crassa, opaca, ex hyphis radiantibus, ad marginem tortuosis pallidioribusque formata. Ascis clavatis v. subcylindricis, breviter pedicellatis, sursum rotundatis, crasse tunicatis, 70-90 × 25-30, 8-sporis (semper ?). Sporidiis distichis, claviformibus, inaequaliter 1 septatis, 30-35 × 14-16, cellula super. ovoidea, saepe ad apicem attenuata

(18-20 × 14-16), infer. minore, fere conoidea, obtusa (12-14 × 12), pallide brunneis.

Hab. in foliis vivis Myrtaceae cujusdam, Ipanema prope Rio-de-Janeiro, Brasiliae.

ASTEROMYXA Theiss. et Syd., Ann. Mycol. XV, 1917, p. 419. — Mycelium superficiale exhyphopodiatum. Thyriothecia inversa, radiantia, dimidiata, poro centrali praedita, setulosa, dein mucoso-incrustata. Hymenium depressum, simplex, polyascum. Asci clavati ovoidei aparaphysati, octospori. Sporidia brunnea, bilocularia, elongata. — Typ. gen. *Asterom. hirtula* (Speg. ut Dimeriella) Theiss. et Syd. l. c. — Syll. XXII p. 37. 4920

CLYPEOLINA Theiss., Centralbl. f. Bakter., II Abt. Bd. 34., 1912, p. 234, ut sectio). — Theiss. in Theiss. et Sydow, Ann. Mycol. XV, 1917, p. 419. — Est *Clypeolella* mycelio exhyphopodiato donata.

1. **Clypeolina apus** (Theiss.) Theiss. in Theiss. et Syd. l. c., *Clypeolella Apus* Th. Centralbl. Bakt. II Abt. 34. (1912) p. 234. — Subiculo ex hyphis fusco-brunneis, irregulariter ramosis, 5,5-6,5 μ cr., dense junctis composito; hyphopodiis nullis; peritheciis inversis, applanato-conicis, orbicularibus, brunneis, 85-140 μ diam., vertice mox irregulariter resorpto; ascis primo cylindraceo-elongatis, maturis ellipsoideo-ventricosis, octosporis, aparaphysatis, 42-56 × 22-30; sporidiis oblongo-ellipsoideis, 18-20 × 6,5-9, griseo-brunneis, utrinque rotundatis, ad septum constrictis, loculo supero paullo latiore sed minore. 4921

Hab. in foliis Bignoniaceae cujusdam, Sao Leopoldo, Rio Grande do Sul, Brasilia.

THALLOCHAETE Theissen, Ann. Mycol. XI, 1913, p. 501. — Thyriothecia superficialia, inverse radiata; mycelio ramoso, septato, setas erectas emittente. Asci octospori, aparaphysati. Sporae phaeodidymae.

1. **Thallochaete Ingae** Theiss. l. c. p. 501, fig. IV et tab. XXI fig. VI. — Hypophylla. Mycelio arachnoideo, atro; hyphis irregulariter laxe ramosis, rectis, tenerrimis, lacte brunneis, vix 3 μ cr., septis distantibus, facile hinc inde ruptis; setis mycelialibus concoloribus, erectis, basi 5 μ cr., non geniculatis, flexuosis, septatis (cellulis 22-26 μ long.), 100-150 μ long., apice acutiusculis hyalinis, integris; thyriotheciis dense sparsis, inversis concentrice sulcatis, strato 4922

hypharum simplici, membranaceis, applanatis, papilla centrali hemisphaerica praeditis, orbicularibus 100-180 μ v. ellipsoideis 170-250 × 100-170, ostiolo non typico (cellulis apicalibus parenchymaticis ruptis) rotundo v. elongato; ascis ovato-clavatis, aparaphysatis, apice late rotundatis, octosporis, 28-35 × 16-20; sporis laete coloratis, ellipsoideis, tristichis, utrinque rotundatis, 16 × 5-6, medio septatis constrictisque, cellula superiore vix latiore; conidiis tricellularibus, utrinque truncatis, brunneis, cellula infera subhyalina, 18-22 × 6-8. Alia conidia, forte ex hyphis mycelialibus oriunda, fusoidea, 4-cellularia, luteola, subcurvula, 22-25 × 2,5.

Hab. in foliis Ingae sp. (Leguminosae), Manaos, Amazones, Brasilia (Ule).

CLYPEOLELLA v. Höhn. — Syll. XXII p. 544 (ut Subgen.). — Theiss. et Syd., Ann. Mycol. XV, 1917, p. 419.

1. **Clypeolella Ricini** Rac. ap. Theiss. in Centralbl. Bakt. II Abt. 34. (1912) p. 233. — *Asterina Ricini* Rac. in herb. — Amphigena griseo-atra; subiculo ex hyphis brunneis, dense ramosis, 4-5 μ cr., crebre septatis, cellulis singulis 10-30 μ longis composito; hypho podiis unicellularibus, subglobosis, 8-10 μ diam.; conidiis 4-cellularibus, curvatis, utrinque attenuatis et apiculatis, 28-34 × 9-11, cellulis terminalibus pallide brunneis, medianis obscurioribus; peritheciis minutissimis, nudo oculo vix conspicuis, brunneis, rotundatis vel ovoideis, 50-110 μ latis, applanatis, margine haud fimbriatis; ascis globosis, 26-28 μ diam., octosporis; sporidiis levibus, medio septatis, leniter constrictis, loculis paullo inaequalibus, diu hyalinis demum episporio brunneolo, 17-20 × 9-10. 4923

Hab. in foliis Ricini communis (Euphorbiaceae), Buitenzorg, Java.

2. **Clypeolella Solani** Theiss., Centralbl. Bakt. II Abt. 34. (1912) p. 233. — Subiculo ex hyphis fuscis, undulatis, opposite vel alterne ramosis, dense intertextis, 5,5-6,5 μ cr. composito; hyphopodiis alternis, sessilibus, continuis, globosis vel hemisphaericis, integris, 8-11 μ diam.; conidiis hyphogenis 3-septatis, rectis curvulisve, 28-32 × 12-14, cellulis mediis brunneis, extremis hyalinis minoribus, rotundatis vel acutatis; peritheciis minutis, brunneis, 35-55 μ diam., orbicularibus, applanatis, irregulariter e centro resorptis; ascis ovato-globosis, octosporis, aparaphysatis, 45-55 × 38-45; sporidiis demum castaneo-brunneis, 25-27 × 10-13, levibus, utrinque rotundatis, cellula superiore latiore. 4924

Hab. in foliis Solani sp. (Solanaceae), Sao Leopoldo, Rio Grande do Sul, Brasilia.

ENGLERULASTER v. Höhn., Fragm. z. Mykol. 1910, n. 520. — Theissen, Broteria, 1914, p. 78; Theiss. et Syd., Ann. Mycol. XV, 1917, p. 420.

1. **Englerulaster continuus** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 201. — Amphigenus, plerumque epiphyllus, plagulas aterrimas orbiculares 2-4 mm. diam. tandem confluentes majores et irregulares formans; hyphis mycelii atro-brunneis, 6-7 μ latis, rigidulis, crebre septatis; hyphopodiis alternantibus, unicellularibus, semiglobosis, 8-12 μ latis et altis; thyriotheciis primitus plane convexis, tandem multo magis convexis, 200-300 μ diam., subopacis; ascis ovatis, aparaphysatis, 55-75 × 40 50, octosporis; sporidiis oblongis, obscure brunneis, medio vel circa medium septatis, constrictis, levibus, 25-34 × 12-16. 1925

   Hab. in foliis Ilicis pedunculosae (Aquifoliaceae), prov. Mino Kawauye-mura, Japonia (K. Hara). — *Engler. alpina* (Rac.) Theiss. proximus.

2. **Englerulaster atrides** Syd., Ann. Mycol. XV, 1917, p. 239. — Amphigena praecipue epiphylla, plagulas omnino irregulares minutas vel majores 2-10 mm. diam. tenues formans; mycelium laxe ramosum, ex hyphis brunneis 5,5 6,5 μ crassis rectiusculis vel flexuosis septatis (articulis 20-28 μ longis) compositum, hyphopodia sparsa, modice copiosa, continua, 10-13 μ alta vel lata, saepe latiora quam altiora, plerumque plus minus distincte bilobata (lobis crassis obtusis), ad basim saepe stipitiformiter contracta; thyriothecia conferta, subglobosa, 100-150 μ diam., radiatim ex hyphis 3-3,5 μ crassis, olivaceo-brunneolis, contexta, mox mucosa dissoluta et usque ad marginem aperta; asci ovati vel ovato-globosi, aparaphysati, 40-60 × 35-40, octospori; sporae oblongae, medio vel paullo supra septatae, constrictae, utrinque rotundatae, primitus aureae, maturae, aterrimae, opacae, 24-27 × 11-12, loculo superiore plerumque leniter latiori sed breviore. 1926

   Hab. in foliis Modeccae (Adeniae) coccineae (Passifloraceae), Bataan, Luzon Ins. Philipp. (M. Ramos).

SYMPHASTER Theiss. et Syd., Ann. Mycol. XIII, 1915, p. 217 et 668, XV, 1917, p. 418. — Mycelium hyphopodiatum. Thyriothecia scutata radiantia, polyasca; asci in loculis plurimis stromate hyalino- 1927

fibroso divisis congregati, ovoidei, aparaphysati. Sporidia brunnea didyma. — Typus generis *Symph. Gesneraceae* (P. Henn. ut Cocconia) Th. et Syd.

Sect. 3. Phaeodidymae

*) **LEMBOSIA** Lév. — Syll. II p. 741, IX p. 1104, p. 387, XIV p. XIV p. 712, XVI p. 663, XVII p. 897, XXII p. 561.

1. **Lembosia Rolliniae** Rehm in herb., Theissen, Ann. Mycol. XI, 1913, p. 442. — Peritheciis minutissimis 0,3-0,35 × 0,1 mm.; mycelio pallide brunneo, ex hyphis 5 μ cr. crasse tunicatis, hyphopodiis sparsis irregulariter globosis, 5-7 μ, praeditis efformato; ascis e ovoideis, 50-60 × 30, cylindraceo clavatis, 65 × 25, parce paraphysatis; sporidiis atro-brunneis 24-26 × 10-11, levibus, loculis subinaequalibus. 4928

Hab. in Rollinia sp. (Anonaceae), in Brasilia merid. (Ule).— Proxima *Lemb. Warscewicziae* P. Henn.

2. **Lembosia Pothoidei** Rehm, Ascomyc. Philipp. I, in Philipp. Journ. of Sci. VIII (1913) p. 191. — Mycelio epiphyllo, effuso, arachnoideo, arcte adnato, ex hyphis fuscis, septatis, 5 μ cr., ramosis, hyphopodia pauca subglobosa 1-cellularia 7-8 μ cr. gerentibus formato, plagas nigritulas usque ad 2 cm. diam., orbiculares, centro demum peritheciis creberrimis obsessas, ambitu vix conspicuas figurante; peritheciis primitus sparsis, dein plus minusve arcte congregatis, atris, carbonaceis, glabris, raro orbicularibus, plerumque elongatis, utrinque obtusis, rectis, 400-500 μ longis, 300 μ latis, apice longitudinaliter vel stellatim rimose dehiscentibus, pseudoprosenchymatice centrifuge contextis, radiatim in mycelium basale transeuntibus; ascis ovoideis, crasse tunicatis, ca. 80 × 40, octosporis; paraphysibus nullis nisi stratum intermedium hyalinum; sporidiis ovoideis, medio aut paullulum inferius septatis, subconstrictis, hyalinis dein brunneis, 25-27 × 12. Adsunt conidia oblonga recta vel subcurvata, continua, fusca, 30 × 6-7, ut in *Lembosia Cassupae* P. Henn. 4929

Hab. in foliis Pothoidei (Araceae), Luzon, Prov. Laguna, Mt. Maquiling, ins. Philipp. (C. F. Baker). — Affinis *L. decalvanti*

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*) Caracteres gen. secundum Theissen (*Lembosia-Studien*, Ann. Mycol. XI, 1913, p. 427); Mycelium superficiale, hyphis ramosis, septatis hyphopodiatis. Thyriothecia dimidiato-scutata, inversa (nucleo anatrop.), radiato-prosenchymatica, stratosa, typica oblongo linearia, rima longitudinali irregulari dehiscentia. Asci paraphysati, octospori. Sporidia phaeodidyma.

Pat. a qua forma et dispositione peritheciorum distinguitur.

3. **Lembosia Heptapleuri** Sacc., Notae Mycol. XXIV p. 14 (Bull. Orto botan. Nap. 1918). — Perithecis epiphyllis, superficialibus, laxe gregariis undique versis, mycelio subcuticulari parco suffultis, anguste lanceolatis v. sublinearibus, 300-1000 × 100-120, nigris, rima angustissima longitudinali dehiscentibus, toto ambitu ad basim hyalino-denticulatis; ascis dense parallele stipitatis, paraphysibus apice brunneo-grumosis obvallatis, tereti oblongis, circ. 40 × 12, octosporis; sporidiis oblique monostichis, oblongis, utrinque rotundatis, medio constricto 1-septatis, 16 × 5, diu hyalinis, dein fuscis. 4930

Hab. in foliis morientibus, e subiculo innato leviter atratis, Heptapleuri sp. culti (Araliaceae), Singapore (Baker).

4. **Lembosia modesta** Theissen, Ann. Mycol. XI. 1913, p. 511. — Hyphis mycelii irregulariter radiantibus, laeticoloribus, tenerrimis, 3 μ cr., alternis laxe ramosis; hyphopodiis sparsis minutis globosis, 5-6 μ diam.; thyriotheciis elongatis, 170-250 × 60-90, inversis, radiatis, hyphis fuligineo-brunneis delicatis 2-3 μ cr. contextis, opacis; ascis ovoideis 30-40 × 20-24, octosporis; sporis brunneis, laevibus utrinque rotundatis, 12-14 × 7, medio septatis et constrictis; paraphysibus filiformibus, ascos superantibus, non conglutinatis, apice vix incrassatis. 4931

Hab. hypophylla in foliis Araucariae brasiliensis (Coniferae), Serra Geral, Brasiliae (Ule). — Soc. *Pseudomeliola brasiliensi* Speg. Affinis *Lemb. microtheceae* Theiss. a qua differt forma hyphopodiorum et modis sporarum.

5. **Lembosia glonioidea** Sacc., Notae Mycol. XXIV p. 15 (Bull. orto bot. Napoli 1918). — Perithecis dense gregariis, lanceolatis, atris, membranaceis, simplicibus, non raro 2-3-radiatis, diu epidermide subtectis, demum erumpenti-subsuperficialibus, 330-600 × 90, laciniis epidermidis limitatis, latiuscule rimosis; ascis tereti-clavatis, apice rotundatis, brevissime stipitatis, 45-50 × 6-6,5, pseudo-paraphysibus epithecium fuscellum formantibus; sporidiis oblique monostichis, oblongis, 8-9 × 3, constricto-1-septatis, dilute fuligineis, loculo superiore paullo crassiore et obtusiore. 4932

Hab. in ramulis emortuis subputrescentibus, corticatis Heveae brasiliensis (Euphorbiaceae) cultae, Singapore (Baker). — Asci marginales minores, inanes, paraphysioidei. Subiculo deficiente v. obsoleto ad gen. *Lembosinam* neotericorum spectaret. Videretur quoque *Glonium* minutum phaeodidymum.

6. **Lembosia decolorans** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 561. — 4933

Epiphylla, matricem decolorans et maculas orbiculares v. confluendo irregulares 3-10 mm. diam. fuscidulas efficiens; mycelio perparco, vix visibili, ex hyphis tenuibus 3-4 μ latis ramosis parce hyphopodiatis composito; hyphopodiis subglobosis, continuis, 4-5,5 μ longis; thyriotheciis paucis in quaque macula, elongatis, 300-450 μ long. 140-170 μ latis, atris, opacis, ex hyphis, ca. 3-4 μ crassis radiatim compositis, tandem rima lata apertis; ascis ovato-oblongis, copiose paraphysatis, superne crasse tunicatis, 40-55 × 16-22, octosporis; sporidiis oblongis, utrinque rotundatis, medio septatis et non v. vix constrictis, ex hyalino fuscidulis, levibus, 13-16 × 5,5-7, distichis usque tristichis.

Hab. in foliis Quercus ovalis (Fagaceae), Sampaloc pr. Bulacan, Ins. Philippin. (M. Ramos), in consortio *Trichothyrii orbicularis* Syd.

7. **Lembosia nervisequa** Syd., Philipp. Journ. of Sc. Bot., IX, 1914, 4934
p. 183. — Amphigena, praecipue nervos sequens, plagulas atras plus minus elongatas confluentes formans; mycelio parco, ex hyphis fuscis vix septatis 5-7 μ crassis anastomosantibus flexuosis composito; hyphopodiis nullis vel saltem non visis; peritheciis densiuscule dispositis, primitus rotundatis 200-300 μ diam., dein elongatis 300-550 μ longis 150-180 μ latis, rima longitudinali dehiscentibus, contextu centrali atro-fusco opaco marginem versus fusco ex hyphis rectis 4-4,5 μ crassis (articulis 8-11 μ longis) composito; ascis globoso-ovatis, parce paraphysatis, 50-58 × 40-46, octosporis; sporidiis conglobatis, ellipsoideis, utrinque late rotundatis, medio 1-septatis, vix vel leniter constrictis, minutissime verruculosis, ex hyalino sordite olivaceis, 23-26 × 12-13.

Hab. in foliis vivis Litseae sp. (Lauraceae), Palawan, Taytay, Ins. Philipp. (Merrill).

8. **Lembosia hormosiana** Sacc., Notae Mycol. XXIV p. 14 (Bull. Orto 4935
bot. Nap. 1918). — Epiphylla, tenuissima, superficialis; subiculo adpresso intricato-ramoso fuligineo, hyphis 3,5-4 μ cr., hyphopodiis oblongis, obtusis, 7-10 × 3, praeditis; peritheciis lanceolatis, applanatis, 235-400 × 90, nigris, longitrorsum latiuscule rimosis, ambitu ad basim pilis septulatis fuligineis 45 × 3-4 remotiusculis ornatis; ascis fasciculatis ovato-ellipsoideis subsessilibus 35-40 × 18-20, oligosporis, aparaphysatis; sporidiis conglobatis, obovatis, biloculatibus, constrictis, 16-17 × 6-6,5, diu hyalinis, dein brunneis, guttulatis, cellula super. paullo crassiore.

Hab. in foliis morientibus Hormosiae sumatranae cul-

tae (Leguminosae), Singapore (BAKER). — Perithecia innituntur hypothallo subradiato cellulis superne opacis.

9. **Lembosia Melastomatum** Mont. — Syll. II p. 742 – var. **Puttemansii** 4936
G. Arnaud, Ann. École Nat. Agriculture Montpellier t. 16., 1918, p. 133. — A typo recedit sporidiis vix crassioribus, 27,5 × 13,5, nec 28 × 12,5 et austoriis in parte intraepidermica minus inflatis.

Hab. in foliis Melastomataceae cujusdam, Aqua Branca prope Sao Paulo, Brasiliae (A. PUTTEMANS). — var. **Maublancii** G. Arnaud, l. c. p. 134, tab. XIX. — A typo recedit austoriis tantum in epidermide sitis. — *Hab.* in foliis Melastomataceae cujusdam, Caraça Minas Geraes, Brasiliae (A. MAUBLANC).

10. **Lembosia miconiicola** G. Arnaud, Ann. École Nat. Agricult. Mont- 4937
pellier, t. 16., 1918, p. 131, tab. XVII et fig. 20. — *L. Melastomatum* var. *microspora* Theissen, Lembosia Studien 1913, p. 438. — Maculis nigris 2-3 mm. latis epiphyllis; mycelio externo stigmopodiis paucis globosis, unilocularibus donato, interno bene evoluto, ramoso, austoriis coralloideis numerosis praedito; stromatibus magnitudine variabilibus, plerumque 0,5-0,8 mm., saepe confluentibus; ascis ovoideis ventricosis, octosporis contextu paraphysoideo obvallatis; sporidiis bilocularibus brunneis, circ. 22 × 11,5.

Hab. in foliis Miconiae stenostachyae (Melastomataceae), Tarapoto Peru, America austr. (E. ULE).

11. **Lembosia Eugeniae** Rehm, Ascomyc. Philipp. II, in Philipp. Journ. 4938
of Sci. VIII (1913) p. 261. — Mycelio epiphyllo, plagas orbiculares 0,5-1,5 cm. latas, nigricantes, haud distincte marginatas, dilute cinereo-fuscidulas, arcte adnatas formante, demum late effuso; hyphis mycelii nudo oculo haud conspicuis, gracilibus, sparse utrinque ramosis, septatis, 3-4 μ cr., hyphopodia cylindracea, unilateralia, 2-cellularia, fusca, recta, 10 × 2,5 gerentibus; peritheciis sparsis, sessilibus, atris, glabris, rectis, linearibus vel subfusiformibus, rimose dehiscentibus, 150-200 μ longis, 100 μ latis, centrifuge contextis, ad basim in mycelium radiantibus; ascis ovoideis, octosporis, filiformi-paraphysatis, 60 × 30; sporidiis oblongis, utrinque rotundatis, rectis, medio septatis et constrictis, demum fuscis, 20-22 × 8-9, halone mucosa 5 μ lata obductis.

Hab. in foliis Eugeniae (Myrtaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (C. F. BAKER). — Affinis *L. decalvanti* fm. *Coccoli* Pat.; differt characteribus mycelii et peritheciis omnino sparsis.

12. **Lembosia microcarpa** Syd., Ann. Mycol. XV, 1917, p. 248. — Pla- 4939

gulas primitus orbiculares dein confluendo irregulares effusas formans, mycelium sat copiosum, ex hyphis undulatis 2,5-3,5 μ crassis remote septatis copiose ramosis fuscidulis haud hyphopodiatis nec nodulis compositum; thyriothecia laxe gregaria, minuta, sed elongata 200-400 μ longa, 50-100 μ lata, recta vel saepe curvata, rima longitudinali dehiscentia, contextu radiato opaco, ambitu hyphis 2-3 μ crassis iis mycelii similibus copiose fimbriata; asci ovati vel ovato-globosi, paraphysati, 23-27 × 16-20, octospori; sporae oblongae, utrinque rotundatae, medio septatae et vix vel leniter constrictae, fuscae, leves, 11-14 × 4-5 μ.

Hab. in foliis C a l a m i sp. (Palmae), Bataan, Luzon, Ins. Philipp. (M. Ramos).

13. **Lembosia Pandani** (Rostr.) Theiss., Ann. Mycol. XI, 1913, p. 457, 4940
Asterina Pandani Rostr. — Sacc. Syll. XVII p. 881. — Syn. *Lemb. Pandani* Rehm, Ascom. Philippin. VII, in Leaflt. of Philipp. Bot. VIII, 1916, p. 2932.

Hab. in pag. sup. foliorum P a n d a n i C o p e l a n d i emortuorum (Pandanaceae), Paete, ins. Philippin. (Baker). — Perithecia initio circulari-oblongula, fere asterinacea, mox vero anguste lanceolata, 0,5 mm. longa, 100 μ lata, rimosa. Asci 28-30 × 24-26, octospori; sporidia didyma, 20-22 × 9-10, diu hyalina, dein mellea, tandem brunnea. — *Lemb. Cocoes* Rehm, forsitam modo matrice diversa. Etiam *Lemb. crustacea* (Cke.) Th. aegre distinguenda.

14. **Lembosia Pavettae** Theiss., Ann. Mycol. XI, 1913, p. 429, t. XX 4941
fig. 28. — Plagulis plerunque epiphyllis, nigris 1 mm. latis in mycelium laxum ramosum periphaerice desinentibus; hyphopodiis brunneis sparsis, depresse subglobosis 5-7 μ cr.; peritheciis dense congregatis, superficialibus, ex hyphis radiantibus 4 μ cr. efformatis; ascis dense paraphysatis (paraphysibus ascos superantibus simplicibus v. ramosis apice vix incrassatis), octosporis subclavatis usque 65 × 10-12, J. ope disco ascigero intense cyaneo paraphysibus flavo-brunneis; sporidiis demum distichis, oblongis, 18-21 × 6-8, brunneis, loculo superiori plerumque breviori et latiori.

Hab. in foliis P a v e t t a e i n d i c a e (Rubiaceae), Peradeniya Ceylon (T. Petch). — var. **luzonensis** Syd., Ann. Mycol. XV, 1917, p. 249. — Epiphylla, plagulas minutas vel majores usque 1 cm. diam. formans; mycelium ex hyphis densissime intertextis, ramosis anastomosantibus saepe connatis brunneis irregularibus 3-5 μ crassis remote septatis formatum; hyphopodia parcissime evoluta, hemiglobosa, 5-7 μ diam.; thyriothecia gregaria, oblonga vel trigona aut

linearia, 300-600 μ longa, 180-250 μ alta, alte convexa, aterrima opaca, ex hyphis 2,5-3 μ latis contexta; asci ovato-oblongi, 35-50 × 20-25, octospori; paraphyses copiosissimae, hyalinae, ascos superantes, superne haud incrassatae; sporae oblongae vel oblongo-ellipsoideae, utrinque rotundatae, medio septatae et leniter constrictae, leves, ex hyalino fuscidulae, 18-21 × 7-9, cellula superiore saepe leniter latiore, sed breviore.

Hab. in foliis Pavettae sp. (Rubiaceae), Rizal Luzon, Ins. Philipp. (M. Ramos).

15. **Lembosia philippinensis** Syd., Ann. Mycol. XV, 1917, p. 249. — Amphigena, plagulas orbiculares, usque 1 cm. diam. dein confluendo saepe irregulares formans; mycelium ex hyphis dense intricato-ramosis fuscis 2,5-4 μ crassis remote septatis haud hyphopodiatis compositum; thyriothecia laxe gregaria, mox elongata, 250-600 μ longa, 150-190 μ lata, rarius trigona, rima longitudinali dehiscentia, radiatim contexta, contextu opaco, ambitu saepe parum fimbriata; asci ovati vel oblongo-ovati, 35-46 × 20-24, octospori; paraphyses copiose, ad apicem plerumque lenissime dilatatae; sporae oblongae, utrinque rotundatae, medio septatae et constrictae, leves, brunneae, 17-19 × 6-7. 4942

Hab. in foliis Randiae (?) sp. (Rubiaceae), Bataan Luzon, Ins. Philipp. (M. Ramos).

16. **Lembosia Rubiacearum** G. Arnaud, Ann. Ecole Nat. Agriculture Montpellier, t. 61., 1918, p. 135, tab. XX. — Maculis epiphyllis parum visibilibus, 2-3 mm. diam.; mycelio externo parum copioso stigmopodiis globosis v. plus minus deformibus praedito; mycelio interno austoriis racemosis epidermicis donato; stromatibus ellipsoideis 400 μ circ. long.; ascis ovoideis; sporidiis 21,5 × 14,5, bilocularibus, brunneis. 4943

Hab. in foliis Rubiaceae cujusdam, loco?, America merid. (Ule).

17. **Lembosia inconspicua** Syd., Philipp. Journ. of Sc., Bot., IX, 1914, p. 183. — Epiphylla, plagulas tenuissimas vix conspicuas 2-8 mm. latas formans; mycelio ex hyphis dilute fuscis dense ramosis septatis irregularibus 3-4 μ crassis composito; hyphopodiis rarissimis, continuis, brevissimis; peritheciis sparis vel laxe aggregatis, anguste oblongis usque linearibus, plerumque 150-350 μ longis et 100-150 μ latis, subinde valde elongatis et tunc usque 1 mm. longis, tenuibus, rectis vel subrectis, opace, atris, rima longitudinali latiuscula apertis, contextu opaco atro ex hyphis tenuibus rectis 4944

vel subrectis ca. 2 μ crassis composito ; ascis ovatis, apice late rotundatis et incrassatis, sessilibus, 26-32 × 14-20 ; paraphysibus copiosis, superne leniter incrassatis, obtusis, ad apicem 2-2,5 μ latis, hyalinis ; sporidiis octonis, conglobatis, elongato-ovatis, levibus, ex hyalino tandem fuscis, 11-15 × 3,5-5, loculo superiore globuloso ; inferiore angustiore et longiore, ad septum non vel vix constrictis.

Hab. in foliis G u i o a e sp. (Sapindaceae), Palawan Taytay, Ins. Philippin. (MERRILL).

MAURODOTHELLA G. Arnaud, Ann. Ecole Nat. Agricult. Montpellier t. 16, 1918, p. 124 (Etym. a gen. *Maurodothis* quia affinis). — A gen. *Lembosia* stigmopodiis et stigmocystis nullis tantum differt. — Ex duob. subgen. sistit: *Eu-Maurodothella* Arn., sporidiis aequaliter brunneis, *Maurodothina* Arn. sporidiis brunneis sed duobus zonulis hyalinis donatis.

1. **Maurodothella Psychotriae** G. Arnaud, l. c. p. 125, tab. XIII. — Maculis parvis 1-2 mm. diam. epiphyllis (an semper ?) ; mycelio externo parum visibile et copioso ; stromatibus in centro macularum irregulariter dispositis quandoque distincte radiantibus 0,65-0,9 mm. long. ; ascis ovoideo-oblongis, octosporis, contextu paraphysoideo copiose obvallatis ; sporidiis bilocularibus obscure brunneis, 30 × 14,5-15. Mycelio externo brunneo, ramoso, stigmatocistis nullis ; mycelio interno copioso, inter epidermide et mesophyllo orto, austoriis coralloideis praedito. 4945

Hab. in foliis P s y c h o t r i a e sp. (Rubiaceae), Rio Maña, America austr. (E. ULE).

CIRSOSIA G. Arnaud, Ann. École Nat. Agricult. Montpellier t. 16., 1918, p. 127. (Etym. e *cirsos* = varix, quia mycelio varicoso ex stigmocystis inflatis). — Stroma ut in *Lembosia* ; mycelio aereo brunneo, stigmocystis inflatis et filamentis donatis praedito, contextu paraphysoideo praesenti. Huc pertinet *Lembosia manaoensis* P. Henn. et tunc *Cirs. manaoensis* (P. Henn.) Arnaud vocanda. 4946

CIRSOSIELLA G. Arnaud, Ann. Ecole Nat. Agriculture Montpellier, t. 16 , 1918, p. 127. — Est *Cirsosia* contextu paraphysoideo destituta. Gen. *Morenoëlla* etiam affine. — Huc ducendae sunt sec. Arnaud : *Morenoëlla transversalis* (Syd.) Th., *irregularis* (Syd.) Th. nec non *Lembosia globulifera* Pat. 4947

ECHIDNODES Theiss. et Sydow, Ann. Mycol. XV, 1917, p. 422. — Est *Lembosia* exhyphopodiata. — Typ. gen. *Echid. Litsuræ* (Cke. ut Aulographum), *E. baccharidincola* (Rehm ut Lembosia) Th. et Syd., *E. Bromaliacearum* (Rehm) Th. et Syd., *hypophylla* Syd., *Vrieseae* (v. Höhn. ut Lembosia) Th. et Syd. (= ? Micropeltis Vrieseae Rehm). 4948

ECHIDNODELLA Theiss. et Syd., Ann. Mycol. XV, 1917, p. 422.— Est *Morenoëlla* exhyphopodiata.

1. **Echidnodella linearis** (Syd.) Syd. in Th. et Syd., Ann. Mycol. XV, 1917, p. 422, *Morenoëlla linearis* Syd., Ann. Mycol. l. c. p. 250.— Hypophylla, plagulas irregulares tenues saepe confluentes et plus minus effusas formans; mycelium copiose evolutum, ex hyphis copiose anastomosantibus varie ramosis undulatis fuscidulis 2,5-3 μ latis haud hyphopodiatis compositum; thyriothecia laxe aggregata, exacte linearia, $^1/_2$-1 $^1/_2$ mm. longa, 100-150 μ lata, rima angustissima aperta, recta, curvata vel geniculata, opaca, radiatim contexta, ambitu copiose fimbriata et in mycelium abeuntia; asci clavati vel saccati, sessiles ad apicem rotundati et incrassati, 30-35 × 14-16, octospori, aparaphysati; sporae oblongae, angustae, circa medium 1-septatae, ex hyalino olivaceo-brunneae, 11-13 × 3-4. 4949

Hab. in foliis Cynomatrae sp. (Leguminosae), Samar, Ins. Philipp. (M. Ramos).

MORENOËLLA Speg. — Syll. IX p. 1094, XVI p. 653.

1. **Morenoëlla Memecyli** Syd., Philipp. Journ. of Sc., Bot., IX, 1914, p. 183. — Peritheciis hypophyllis, in mycelio parcissime evoluto ex hyphis ramosis vix vel parce septatis fuscidulis 3,5-4,5 μ crassis levibus composito haud hyphopodiato (hyphopodiis saltem non visis) insidentibus, superficialibus, primitus orbicularibus, tandem elongatis, 200-450 μ longis, 120-160 μ latis, plerumque rectis, rima latiuscula dehiscentibus, contextu opaco ex hyphis radiantibus obscure brunneis 3-3,5 μ crassis crebre septatis (articulis 7-9 μ longis) composito; ascis subglobosis vel ovatis, rarius leniter elongatis, aparaphysatis, 35-55 μ longis, 26-35 μ latis, octosporis; sporidiis oblongis, utrinque rotundatis, medio 1-septatis, leniter constrictis, levibus, ex hyalino fuscis, 20-23 μ longis, 8-10 μ latis, cellula superiore parum latiore quam inferiore. 4950

Hab. in foliis Memecylonis lanceolati (socio *Dictyothyrio gigantea* Speg.), Palawan, Taytay, Ins. Philipp. (Merrill).

2. **Morenoëlla Anisopterae** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 560. — Epiphylla, plagulas orbiculares 3-10 mm. diam. formans; mycelio laxo, ex hyphis obscure brunneis 6-8,5 μ latis rectis opposite ramosis nodos gerentibus composito; nodis crassis, hemisphaerice prominentibus, 10-14 μ diam.; thyriothecciis laxe gregariis, ex rotundato mox ellipticis usque linearibus, 500-800 μ long. 350-450 μ latis, alte convexis, ambitu plus minus fimbriatis, opacis, ex hyphis rectis 4-5,5 μ crassis (articulis 10-14 μ long.) composito; ascis globosis usque ovatis, aparaphysatis, octosporis, 45-65 × 35-50; sporidiis medio v. infra medium septatis, non v. parum constrictis, brunneis, 28-36 × 17-20, levibus, loculis aequalibus v. superiore leniter majore. 4951

Hab. in foliis Anisopterae thuriferae (Dipterocarpaceae), prov. Rizal, Ins. Philippin. (M. Ramos).

3. **Morenoëlla anisocarpa** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 559. — Epiphylla, plagulas rotundatas 2-8 mm. latas efformans; mycelio ex hyphis radiantibus ramosis anastomosantibus obscure brunneis 6-8 μ crassis haud hyphopodiatis sed nodos gerentibus composito; nodis hemisphaericis v. globosis, 10-15 μ diam.; thyriothecciis densiuscule dispositis, primitus rotundatis et 350-500 μ diam., tandem elongatis 500-1000 μ longis, 250-350 μ latis alte convexis, opacis, ex hyphis 4-5 μ latis composito, ambitu fimbriatis; ascis globosis v. ovato-globosis, 65-80 × 50 70, octosporis, aparaphysatis; sporidiis conglobatis, ovato-oblongis, ex hyalino sordide brunneis, levibus, infra medium septatis et leniter v. magis constrictis, totis 36-40 μ longis, loculo superiore majore et latiore 22-26 × 20-24, inferiore minore, 12-16 × 16-20, plerumque latiore quam longiore. 4952

Hab. in foliis Hopeae plagatae (Dipterocarpaceae), Angat prov. Bulacan, Ins. Philippin. (M. Ramos). — *Mor. irregularis* (Syd.) Theiss. proxima sed differt praecipue sporidiis inaequaliter septatis.

4. **Morenoëlla Ramosi** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 560.— Hypophylla, greges 0,5-1,5 cm. latos efformans; mycelio parco, radiante, ex hyphis opposito-ramosis, saepe anastomosantibus fuscis 4,5-6,5 μ latis hyphopodiis destitutis composito; thyriothecciis laxe ordinatis, ellipticis, oblongis v. subinde trigonis, opacis, marginem versus dilutioribus, convexis usque 1 mm. longis, 250-400 μ latis, contextu ex hyphis 4-6 μ latis (articulis 7-10 μ longis) rectis composito; ascis ovato-globosis, aparaphysatis, 50-75 × 40-60, 6-8-spo- 4953

ris; sporidiis conglobatis, ellipsoideis utrinque late rotundatis, medio 1-septatis et valde constrictis, minutissime verruculosis, in maturitate opace brunneis, 32-38 × 17-20.

Hab. in foliis Pentacmes contortae (Dipterocarpaceae), prov. Rizal, Ins. Philippin. (M. Ramos).

5. **Morenoëlla Bakeri** Syd., Ann. Mycol. XV, 1917, p. 260. — Epiphylla, 4954
plagulas densas orbiculares vel irregulares 2-10 mm. diam. formans; mycelium densissime intertextum, ex hyphis obscure castaneo-brunneis 7-9 μ crassis copiose breviterque ramosis anastomosantibusque septatis compositum; hyphopodia ad hyphas dense intertextas tantum copiose evoluta, hemisphaerico-globosa, continua, integra, 15 20 μ diam., thyriothecia circinatim denseque disposita, primitus orbicularia, dein oblonga, 400-700 μ longa, 200-320 μ lata, radiatim ex hyphis rectis 4-5 μ crassis opacis contexta, ad ambitum hyphis 7-9 μ crassis fimbriata, rimose dehiscentia; asci paraphysati, globosi vel ovato-globosi 60-70 × 45-65, octospori; sporae ellipsoideae vel ovatae, utrinque late rotundatae, medio, vel paullo infra medium septatae, vix vel leniter constrictae, leves, sordide olivaceo-brunneae, 34-42 × 18-24.

Hab. in foliis Shoreae sp. (Dipterocarpaceae), pr. Paete, Laguna, Ins. Philipp. (C. F. Baker).

6. **Morenoëlla Beilschmiediae** H. S. Yates, Philipp. Journ. Sc. XII, 4955
(1917) p. 373. — Hypophylla, plagulae totum folium plus minusve occupantes; mycelio parcissime evoluto, ex hyphis radiantibus ramosis anastomosantibus brunneis 3-5 μ crassis composito, perithecciis numerosis, primitus orbicularibus, tandem elongatis, 400-600 × 100-150, rima latiuscula dehiscentibus, contextu ex hyphis radiantibus obscure brunneis 3-5 μ latis composito; ascis ovatis, 36-45 × 25-30, octosporis; sporidiis oblongis, utrinque rotundatis, medio 1-septatis, vix constrictis, laevibus, hyalino-fuscis, 25-30 × 6-7, cellula superiore parum latiore quam inferiore.

Hab. in foliis Beilschmiediae nervosae (Lauraceae), Catubing River, Samar, Ins. Philipp.

7. **Morenoëlla lagunensis** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 4956
560. — Epiphylla, maculas atras orbiculares 0,6-1 cm. diam. formans; mycelio radiante, ex hyphis obscure brunneis reticulato-ramosis 5,5-7 μ crassis composito; hyphopodiis paucis, clavato-capitatis, alternantibus, 13-15 μ long., cellula basali brevi, superiore late rotundata 9-11 μ lata, concoloribus; thyriotheciis numerosis in quaque plagula, oblongis usque linearibus, 250-500 μ long.

120-200 μ latis, opacis, rima longitudinali dehiscentibus, ex hyphis obscure brunneis ca. 4,5-5 μ cr. prosenchymatice radiatim contextis, ambitu fimbriatis; ascis aparaphysatis, ovatis, 40-50 × 28-35, octosporis; sporis oblongis, medio 1-septatis et constrictis, ex hyalino brunneis, levibus, 20-23 × 10-11.

Hab. in foliis Neolitseae sp. (Lauraceae), Mt. Maquiling prov. Laguna, Luzon, Ins. Philippin. (P. W. Graff).

8. **Morenoëlla Fagraeae** Syd., Ann. Mycol. XV, 1917, p. 251. — Plagulas 4957
epiphyllas irregulares tenues parum perspicuas usque 1 cm. latas formans; mycelium parum evolutum, ex hyphis brunneolis tenuibus 2,5-3,5 μ crassis ramosis haud hyphopodiatis compositum; thyriothecia laxe disposita, recta vel flexuosa, linearia, 400-800 μ longa, 100-150 μ lata, rima longitudinale dehiscentia, contextu atro opaco ex hyphis 3-4 μ crassis composito; asci oblongi vel clavulati, aparaphysati, apice incrassati, 28-35 × 13-16, octospori; sporae distichae, oblongae, utrinque rotundatae, fuscae, leves, medio septatae et leniter constrictae, 12-14 × 4,5-5,5.

Hab. in foliis Fagraeae racemosae (Loganiaceae), San Antonio, Laguna, Luzon, Ins. Philipp. (M. Ramos).

9. **Morenoëlla samarensis** Syd., Ann. Mycol. XV, 1917, p. 250. — E- 4958
piphylla, plagulas minutas orbiculares 1-3 mm. diam. formans; mycelium parce evolutum, ex hyphis laxe ramosis anastomosantibusque brunneis 4 μ crassis compositum; hyphopodia rara, solitaria, continua, integra vel subinde leniter lobata, saepe depressa, 5-7 μ lata; thyriothecia gregaria, oblonga vel linearia, 250-800 μ longa, 150-200 μ lata, radiatim et hyphis 2,5-3 μ crassis omnino opacis contexta, ambitu hyphis similibus sed flavo-brunneis plerumque copiose fimbriata, rima angusta aperta; asci aparaphysati, ovato-oblongi vel oblongi, ad apicem crasse tunicati, 38-44 × 20-24, octospori; sporae oblongo-ovatae, utrinque rotundatae, medio septatae, leniter constrictae, leves, in maturitate fuscae, 16-18 × 6-7.

Hab. in foliis Stephaniae sp. (Menispermaceae), Catubig River, Samar, Ins. Philipp. (M. Ramos).

10. **Morenoëlla Mollinediae** G. Arnaud, Ann. Ecole Nat. Agriculture 4959
Montpellier t. 16., 1918, p. 137., tab. XXI. — *Lembosia Myrtacearum* Theiss. nec Speg. — Maculis epiphyllis 1-2 mm. diam.; mycelio externo parum copioso alterne ramoso et stigmopodiis plerumque alterne dispositis elongatis saepe contortis praedito; austoriis racemosis; stromatibus 400 μ long., saepe confluentibus et tunc longioribus, parietibus tenuibus donatis; ascis ovoideis, contextu

paraphysoideo nullo; sporidiis bilocularibus brunneis, angustis, 17 × 6,5.

Hab. in foliis Mollinediae elegantis (Monimiaceae), Sao Leopoldo, Brasiliae (RICK, Fungi austro-americani n. 262).

11. **Morenoëlla tenuis** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 560.— 4960
Epiphylla, plagulas orbiculares v. irregulares saepe parum definitas formans; mycelio parco, ex hyphis undulatis obscure brunneis 4-5 μ crassis anastomosantibus composito; hyphopodiis modice numerosis, plerumque alternantibus, rarius oppositis, cylindraceis, 10-13 μ longis, 4,5-5,5 μ latis, rectis v. cellula superiore leniter curvata, obtusis; thyriothecis laxe aggregatis, linearibus, 400-800 μ long. 150-200 μ latis, alte convexis, opacis, contextu ex hyphis flexuosis 3-3,5 μ crassis composito; ascis primitus ovato-globosis et 35-40 × 30-35, dein crasse cylindraceis usque 75 μ longis 25-30 μ latis, octosporis, aparaphysatis; sporidiis ellipsoideo-oblongis, utrinque rotundatis, medio septatis et constrictis, brunneis, levibus, 23-26 × 10-12.

Hab. in foliis Eugeniae sp. (Myrtaceae), Angat prov. Bulacan, Ins. Philippin. (M. RAMOS).— *Mor. Myrtacearum* Speg. proxima sed hyphopodiis obtusioribus et brevioribus sporidiis majoribus praecipue diversa.

MORENOINA Theiss., Ann. Mycol. 12., 1913, p. 434; 15., 1917, p. 417.— 4961
Est *Morenoëlla* mycelio distincto superficiale destituta. — Typ. gen. *Mor. antarctica* (Spegaz.), nec non verisimiliter, *australis* (Speg.), *microscopica* (Speg.), *Curatellae* Starb., *Lembosia lucens* (Harkn.), etc.

SEYNESIELLA G. Arnaud, Ann. Ecole Nat. Agricult. Montpellier, t. 16., 4962
1918, p. 202, tab. XLV (Etym. e *Seynesia* cui analogum gen.). — Rhizomatica; stroma cum mycelio interno hic inde connexo; asci erecti, contextu paraphysoideo; sporidia bilocularia, brunnea.

Spec. typica *Seyn. Juniperi* (Desm. in *Dothidea*) G. Arnaud.

Sect. 4. Hyalophragmiae

HALBANIELLA Theiss., Ann. Mycol. XIV, 1916, p. 430. — Theiss. et 4963
Syd., l. c., XV, 1917, p. 421. — Mycelium liberum superficiale, septatum, brunneum, radians, exhyphopodiatum. Thyriothecia superficialia inversa, radiato-contexta, dimidiata. Asci parce paraphysati, octospori, clavati. Sporidia hyalina, levia, 4-5 locularia. — Typ. gen.

Halbaniella javanica (Rac. ut Heterochlamys) Theiss. l. c. — Verisimiliter huc spectat etiam *Zignoëlla ovoidea* Sacc., sec. v. Höhnel, Ann. Myc. XVIII, 1920, p. 79.

DOTHITHYRELLA v. Höhnel, Ann. Mycol. 16., 1918, p. 171. — Hypostroma in cellulis epidermicis nidulans, brunneum; hypostroma ascigerum superficiale, tenue hinc inde adnatum; mycelium liberum nullum. Loculi rotundati v. depressi stratu proprio scutiforme brunneo tecti et stratu basali hyalino praediti. Pars stromatica sterilis e cellulis seriebus parallele dispositis efformata. Paraphyses filiformes, saepe nullae. Asci ovoidei, octospori. Sporidia 2-4 locularia, hyalina. — Typus gen.: *Doth. litigiosa* (Desm.) v. H. = Microthyrium litigiosum (Desm.) Sacc. 4964

PARAPELTELLA Spegazz., Rel. myc. trop. etc. in Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 143-144 (Etym. a *para* proximum et *Peltella*). — A gen. *Micropeltella* Syd. (ad species ab initio rotunde ostiolato-perforatas reductum) differt thyriotheciis astomis senectute tantum medio radiatim dehiscentibus.

1. **Parapeltella macrosperma** Spegaz., Rel. Mycol. trop. etc. in Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 143. — Maculae nullae sed matrix tota conspicue infuscata; subiculum plane nullum; thyriothecia sparsa minuta 100-150 μ diam. atra, astoma sed per aetatem centro minute stellatim dehiscentia, glabra, coriacella, contextu indistincto, ambitu vix hyalino-marginata ac hyphis nonnullis subreticulatis appendiculata: asci obovati, apice rotundati crassissime tunicati, basi in pedicello brevi crassoque attenuati, aparaphysati, 6-8-spori, 50-60 × 20-25; sporae elongato-subclavulatae utrinque rotundatae, leniter arcuato-inaequilaterales, transverse 9-11-septate, ad septa non constrictae, primo hyalinae demum subchlorinae, 30-40 × 6-7. 4965

Hab. ad folia viva ? Acanthocarpi sp. (Liliaceae), in silvis prope Apiahy, Brasilia (J. Puiggari).

2. **Parapeltella mediocris** Spegaz., Fungi Costaric. nonn., in Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 214, cum icon. — Maculae nullae; thyriothecia laxissime gregaria v. sparsa, mediocria 200-300 μ atra glabra opaca astoma, sed centro minute stellatim dehiscentia, ambitu vix denticulato, non hyalino-marginata, contextu dense minuteque parenchymatico; asci obclavulati, obtusi brevissime crasseque pedicellati omnino aparaphysati, saepius te- 4966

traspori, 60-65 × 18; sporae mediocres lineari-subclavulatae tetramerae hyalinae, 30 × 5-7.

Hab. ad folia viva Myrtaceae ignotae, prope S. Josè Costarica, America trop.

ACTINIOPSIS Starb. — Syll. XVI p. 543, XVII p. 871, XXII p. 530.

1. **Actiniopsis Rickii** Theiss., Broteria, Bot. v. XII, 1914, fasc. I, p. 26. — 4967
Stromata laxe gregaria nigra, cylindrico-globosa, 170-200 μ diam. fasciculis setarum 8-15 supra ornata. Asci ad basim perithecii fasciculati elongati, cylindracei, octospori, 80-90 × 13-16. Paraphyses filiformes numerosae ascos superantes, tenerrime septatae. Sporae imbricate monostichae v. distichae, hyalinae, rectae vel curvulae, basi vel utrinque acutatae, 30-35 × 4-5, transverse 5-7-septatae. Perithecia instructa sunt ostiolo irregulariter orbiculare margine dilacerato. Textura stromatis nigra, fere carbonacea; parietes peritheciales molliores, attamen tenaces, non carnosulae, hyphis tenerrimis, laeticoloribus, dense stipatis et indistincte parellelibus, fasciculi hypharum marginales basi ca. 85 μ lati 180-250 μ longi cuneatim attenuati, albescentes, ad basim ascellarem obscuriores. Saepe singuli fasciculi non distinguuntur, sed in coronam continuam coaliti discum circumdant, peripherice tantum serrato-incisi; hyphae fasciculorum griseo-viridulae ca. 3 μ crassae, singulae singulis dense appressae. Asci breviter stipitati, cylindrici; supra paullo angustati, apice rotundati (interiore tantum sacculo truncato). Iodi ope asci et paraphyses lutescunt.

Hab. epiphylla in foliis Orchideae epiphytae, Sao Leopoldo, Brasiliae merid. (Rick). — *Actiniopsis violaceo-atra* v. Höhn., huic speciei similis differt sporis multo longioribus.

Sect. 5. Phaeophragmiae

AMAZONIA Theiss., Ann. Mycol. 11., 1913, p. 409; Theissen et Sydow; l. c. 15., 1917, p. 421.

1. **Amazonia polypoda** Syd., Ann. Mycol. XV, 1917, p. 145. — Peri- 4968
theciis amphigenis in plagulas minutas 0,5-2 mm. diam., dense dispositis, facile secedentibus, superficialibus, orbicularibus, 350-450 μ diam., radiatim ex hyphis rectis, fuscidulis centro subopacis, 6-8 μ cr., septatis (articulis 15-20 μ long.) ad peripheriam plerumque clavato-dilatatis compositis, haud fimbriatis, centro pluristratosis, ad marginem unistratosis; mycelio ex hyphis radiantibus, lon-

giusculis, regularibus, rectis, fuscis, 8-9 µ cr.; laxe ramosis composito; hyphopodiis capitatis copiosissimis, longa serie alternantibus, subcylindraceis v. oblongo-ovoideis, clavato-stipitatis; semper integris, rotundatis, 15-20 × 10-12, cellula basali brevissima, saepe vix conspicua; hyphopodiis mucronatis multo rarioribus alternatis v. oppositis, superne subtenuatis, 16-22 × 9-11, ascis bisporis, 50-60 × 20-25; sporidiis oblongis, utrinque rotundatis ad septa constrictis, fuscidulis, 35-42 × 14-18, loculis fere aequalibus v. extimis paullo minoribus.

Hab. in foliis Straussiae Marinianae (Rubiaceae), Oahu, Ins. Sandwicensium (H. L. Lyon).— Affinis *Amazon. psychotriicolae* (P. Henn.) Theiss.

PATOUILLARDINA Arnaud, C. R. Ac. d. Sc. Paris, t. 159, 1917, p. 890. — 4969
Mycelium externum stigmopodiis praeditum et perithecios externos generans; paraphyses nullae; asci erecti, paralleli, ellipsoidei v. ovoidei; sporae brunneae pluries transverse septatae. — Huc ducenda est *Meliola clavispora* Pat.

Sect. 6. Phaeodictyae

YATESULA Syd., Ann. Mycol. XV, 1917, p. 237 (Etym. a cl. H. S. Yates fungi detectore). — Membranae superficiales pseudoparenchymatice contextae, atro-brunneae, ad marginem radiantes, sed mycelio proprio libero fere destitutae; hymenia pluria, ubique evoluta, polyascigera; asci clavati, 4-8-spori paraphysati; sporae muriformes, roseolae.

1. **Yatesula Calami** Syd., l. c. p. 237. — Membranae amphigenae spar- 4970
sae vel inde binae trinae aggregatae et confluentes, rotundatae, 1-2 mm. diam., superficiales, atro-brunneae ad marginem radiantes subpellucidae ex hyphis 2,5-3 µ crassis contextae, centro plerumque opacae subatrae, hypothecio fibroso, roseolo; hymenia pluria in quaque membrana evoluta, ubique dispersa, polyascigera; asci clavati vel cylindraceo-clavati, breviter tenuiterque stipitati, superne rotundati, 4-8-spori, indistincte paraphysati, 35-55 × 9-12; sporae plerumque distichae, oblongae vel clavulatae, 3-4 septatae, ad septum medium saepe leniter constrictae, utrinque rotundatae vel ad basim leniter attenuatae, 10-13 × 2,5-3,5, pallide roseolae, praecipue in ascis, cellula una alterave (praecipue apicali) subinde oblique vel horizontaliter septatae.

Hab. in foliis Calami sp. (Palmae), Rizal, Luzon, Ins. Philipp. (H. S. YATES).

Subfam. 4. Trichothyrieae

Dispositio systematica Generum secundum v. Theissen l. c.

Trichothyriaceae Theiss., Beih. Bot. Centralbl. Abt. II, 32., 1914

H. 1. — Theiss. et Sydow, Ann. Mycol. XV, 1917, p. 484; v. Höhnel, Ber. d. Deutsch. Bot. Ges. 35., 1917, pp. 411-416, 2 fig.

I. Thallo copiose evoluto

a) Sporidia hyalodidyma	TRICHOTHYRIUM Speg.
b) Sporidia phaeodidyma	TRICHOTHYRIELLA Theiss.
c) Sporidia hyalophragmia	TRICHOTHYRIOPSIS Theiss.

II. Thallo nullo

a) Sporidia hyalodidyma	LORANTHOMYCES v. H.
b) Sporidia hyalophragmia	ACTINOPELTIS v. H.

TRICHOTHYRIUM Speg. — Syll. IX p. 1062, XXII p. 521 — Syn. *Trichopeltopsis* v. Höhn., Fragm. z. Mykol. VII, 1909, n. 325.

1. **Trichothyrium orbiculare** Syd., Enum. Philipp. Fungi II, in Philipp. 4971
Journ. of Sci. VIII (1913) p. 492, fig. 2.— Hypophyllum, in mycelio *Meliolae* parasiticum, mycelio hyphas *Meliolae* omnino amplectente et pelliculam tenuem fere continuam efformante, ex hyphis obscure olivaceo-fuscis, ramosis et anastomosantibus, vix vel parce septatis, 2-3 μ latis (permultis tenuioribus et pallidioribus subhyalinis interjectis) composito; hyphopodiis nullis; peritheciis radiatim oriundis, dense stipatis, ambitu omnino circularibus, 125-150 μ diam., atris, dimidiato-scutatis, centro ostiolo rotundo 15-25 μ lato distincto praeditis, contextu obscure fusco, saepe subopaco, centro dilutiore, amoene radiatim ex hyphis 2,5-3 μ latis fuscis composito; ascis ovato-oblongis vel oblongis, sessilibus, apice rotundatis, non vel leniter incrassatis, octosporis, aparaphysatis, 35-50 × 15-18; sporidiis distichis, subinde tristichis, ovato-oblongis, medio 1-septatis, non vel leniter constrictis, hyalinis, 14-17 × 3-4,5, cellula superiore latiore.

Hab. in mycelio Meliolae ad folia Heliciae sp. (Proteaceae), Luzon, Subprov. Ifugao, Mt. Polis, ins. Philipp. (Mc. GREGOR). — Specimina immatura videntur; an sporidia demum pluriseptata?

2. **Trichothyrium iquitosense** F. Theissen, Verh. zool.-bot. Ges. 69., 1919, p. 22. — Epiphyllum, ad mycelium Chaetosphaeriae et Meliolae ad natum. Mycelium proprium parce evolutum ex hyphis pallidis ex hyphopodiatis, reticulato-ramosis, 3 μ cr. efformatum. Peritheciis confertis, arescendo discoideo-applanatis, centro papillatis nigris opacis, levibus, 150-170 μ latis, non dimidiatis, contextu radiato efformatis; ascis clavatis v. subcylindraceis, 28-38 × 9-10, parce paraphysatis, breviter pedicellatis, supra rotundatis, octosporis; sporidiis distichis, hyalinis, 7-8 × 2,5, uniseptato-constrictulis, loculo super. subrotundato, inferiori cylindraceo. 1972

Hab. in foliis Palmae cujusdam, Iquitos Rio Amazonas, Brasilia.

TRICHOTHYRIELLA Theiss., Beih. Bot. Centralbl. 32., 1914, p. 4. Theiss. et Sydow, Ann. Mycol. XV, 1917, p. 488. — Thallo filamentoso irregulariter floccoso. Paraphyses nullae. Sporidia bilocularia brunnea. Caeterum ut in *Trichothyrio*. — Typ. gen. *Trich. quercigena* (Berk.) Th. 1973

TRICHOTHYRIOPSIS Theiss., Beih. Bot. Centralbl. 32., 1914, p. 4. Theiss. et Sydow, Ann. Mycol. XV, 1917, p. 488 — A *Trichothyrio* differt sporidiis hyalophragmiis. — Typ. gen. *Tr. densa* (Rac.) Th. l. c., *Tr. sexspora* (Starb.) Th. et *Tr. juruana* Theiss. 1974

LORANTHOMYCES v. Höhn., Fragm. z. Myk. VII, 1914, n. 310. Ber. d. Deutsch. Bot. Ges. 1917, p. 414. — Theiss. et Sydow, Ann. Myc. XV, 1917, p. 488. — Thallo nullo v. evanido. Perithecia in fungis stromaticis nidulantia. Caeterum ut in *Trichothyrio*. Paraphyses nullae. — Typ. gen. *Lor. sordidulus* (Lev.) v. Höhn. l. c., *L. epimyces* (B. R. S.) v. Höhn. 1975

MYCOLANGLOISIA G. Arnaud, Ann. École Nat. Agricult. Montpellier, t. 16., 1918, p. 157 (Etym. a bot. A. B. Langlois). — A Gen. *Trichothyrium* Speg. 1889, stromatibus circa ostiolum setulis erectis ornatis tantum differt.

1. **Mycolangloisia echinata** G. Arnaud, l. c., tab. XXVII. — Stromatibus depresse conoideis margine non fimbriatis 150-170 μ diam., circa ostiolum setulis 8-12, brevibus, 40 μ, brunneis acutis ornatis; sporidiis fusoideis bilocularibus hyalis (an semper ?), 25 × 5, medio constrictulis; mycelio externo incoloro, ramoso-intricato, septulato. 1976

Hab. parasiticum in mycelio? *Parodiopsidis* sp. in foliis Rubiaceae cujusdam, Brasilia, America austr. (E. Ule).

Subf. 5. Trichopelteae

Caracteres et dispositio system. Gen. sec. v. Theissen.

Trichopeltaceae Theissen, Centrlbl. Bakt. II Abt. 39. (1913) p. 629
Theissen et Sydow, Ann. Mycol. 15., 1917, p. 425.

Thallus vegetativus superficialis, membranosus, radiato prosenchymaticus. Loculi ascigeri in ipso thallo pycnotice transformato evolvuntur, peltati, ostiolo demum irregulari aperti.

A. Thallus linearis vel vittaeformis, ramosus Trichopeltineae Theiss.

I. Sporidia 2-locularia
1. Sporidia hyalina — Trichopeltina Theiss.
2. Sporidia colorata — Trichopeltella v. Höhn.
II. Sporidia 3-locularia, hyalina — Trichopeltis Speg.
III. Sporidia 4-plurilocularia hyalina — Trichopeltula Theiss.

B. Thallus rotundatus, confluens — Brefeldiineae Theiss.

I. Sporidia 2-locularia, hyalina — Brefeldiella Speg.
II. Sporidia 2-locularia, colorata — Pycnocarpon Theiss.

TRICHOPELTINA Theiss., Centrlbl. Bakt. II Abt., 39. (1913) p. 630; Theiss. et Sydow, l. c. p. 426. — Thallus superficialis, vittaeformis, ramificatus, radiato-prosenchymaticus. Pycnothecia in thallo formata, centro demum irregulariter pertuso (ostiolo non typico). Asci aparaphysati. Sporae hyalodidymae. 4977

T. Labecula (Mont.) Theiss. — *Asterina Labecula* Mont. — Sacc. Syll. I, p. 44.

T. chilensis (Speg.) Theiss. — *Trichothyrium ch.* Speg. — Syll. XXII p. 521.

TRICHOPELTELLA v. Höhn. — Theiss., loc. cit. p. 632. — Theiss. et Syd., l. c. p. 426. — Est *Trichopeltina* sporidiis phaeodidymis. 4978

T. montana (Rac.) v. Höhn. — *Trichopeltis montana* Racib. — Sacc., Syll. XXII p. 524 [sub *Seynesia*].

TRICHOPELTULA Theiss., Centrlbl. Bakt. II Abt. 39. (1913) p. 636. — Theiss. et Sydow, l. c. p. 427. — Ut *Trichopeltina* sed sporidiis 4-locularibus.

1. **Trichopeltula Hedycariae** Theiss., l. cit., tab. 1 fig. 3. — Epiphylla. 4979
Thallo vittaeformi, repente, ramoso, vittis brunneo-atris 50-90 μ latis, radiato-prosenchymaticis, cellulis anguste rectangularibus; pycnotheciis in thallo formatis, aliis conidioferis 50 μ, aliis ascophoris 80-100 μ diam., applanato-hemisphaericis demum apice perforatis; conidiis bacillaribus, hyalinis, continuis, 7-8 × 1-1,5; ascis aparaphysatis, octosporis, obclavatis, supra late rotundatis, infra in nodum brevissimum coarctatis, 25-30 × 16-18; sporidiis tristichis, hyalinis, oblongis, subcurvatis, 13-15 × 2,5-3, triseptatis, cellulis mediis subcubicis, extremis subconice attenuatis.

Hab. in foliis Hedycariae dentatae (Monimiaceae), in Nova Zelandia (Colenso n. 163 in Herb. Kew, sub *Asterina reptans* B. et C.).

PYCNOCARPON Theiss., Die Gattung Asterina (1912) p. 31; Centrlbl. Bakt. II Abt. 39. (1913) p. 639. — Theiss. et Sydow, l. c. p. 427. — Thallus superficialis consistens ex membranis simplicibus (strato cellularum unico) prosenchymatico-radiantibus, orbicularibus, confluentibus, in centro stratoso et elevato pycnothecia formantibus. Pycnothecia in thallo formata (cellulis ipsius crebrius divisis et incrassatis) rima longitudinali (ostiolo non typico) dehiscentia. Asci aparaphysati. Sporidia phaeodidyma. Receptacula pycnotheciis similibus producunt pycnoconidia atra continua.

1. **Pycnocarpon magnificum** (Syd. et Butl.) Theiss. l. c., *Asterina magnifica* Syd. et Butl., Ann. Mycol. IX, 1911, p. 391. — Peritheciis hypophyllis, plus minus dense aggregatis, hinc inde crustas atras formantibus atro-brunneis, planis, ambitu rotundatis v. subinde lobatis, margine elevato, 500-800 μ diam., rima singula v. pluribus elongatis dehiscentibus, in juventute ut plurimum poro minuto rotundo apertis, mycelio parce evoluto ex hyphis 8-9 μ cr. composito, contextu radiatim celluloso; pycnidiis eadem forma et structura ac peritheciis; pycnidiosporis ovato-oblongis v. oblongis, continuis, brunneis, 35-50 × 15-18; ascis obovatis v. subglobosis, 52-92 × 50-75, 2-8-sporis; sporidiis ellipsoideis, utrinque rotundatis medio 1-septatis, valde constrictis, levibus, brunneis v. fumoso-brunneis, 33-40 × 20-25. 4980

Hab. in foliis Terminaliae sp. (Combretaceae), Moulmein, Burma, Indiae or. (E. J. Butler).

2. **Pycnocarpon fimbriatum** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 563. — Membranis amphigenis, primitus plus minus orbiculari- 4981

bus, dein pluribus confluentibus et tunc pelliculas irregulares vel suborbiculares 1-2 mm. latas formantibus, superficialibus, atris, sub microscopio opace vel fere opace brunneis, ex hyphis prosenchymatico-radiantibus 5-7 μ crassis creberrime septatis (articulis 6-8 μ longis) strato singulo compositis, ambitu hyphis similibus sed remotius septatis plus minus longe fimbriatis, hyphis liberis membranas obtegentibus nullis; pycnotheciis orbicularibus vel saepius ellipticis, 80-150 μ longis, convexis opacis; sporidiis nos visis.

Hab. in foliis Hopeae plagatae (Dipterocarpaceae), Angat prov. Bulacan, Luzon, Ins. Philippin. (M. Ramos).

3. **Pycnocarpon Parashoreae** Syd., Ann. Mycol. XV, 1917, p. 235. — 4982
Thallus superficialis membranas planas confluentes 1-4 mm. diam., atras prosenchymatico-radiantes formans; membranae e strato cellularum unico hypharum fuscarum 2,5-3 μ crassarum septatarum (articulis 6-8 μ longis) compositae ad ambitum hyphis toruloso-flexuosis flavo-brunneis 2,5-3,5 μ crassis fimbriatae; hyphae liberae supra membranas repentes parum evolutae, 3-4 μ crassae; pycnothecia numerosa, ex hyphis obscurioribus crassioribus 3,5-4,5 μ crassis et crebrius septatis (articulis 3,5-5 μ longis) composita; asci ovato-globosi, aparaphysati, superne incrassati, 48-60 × 38-42, octospori; sporae ellipsoideo-oblongae, utrinque rotundatae, medio septatae et constrictae, ex hyalino fuscidulae, leves 25-27 × 10-12; receptacula conidiigera pycnotheciis similia, poro rotundo ca. 20 μ lato aperta, pycnoconidia oblonga vel anguste ellipsoidea, utrinque rotundata, hyalina, 22-25 × 10, episporio crasso, ad apicem hypharum tenuium hyalinarum brevium ortae.

Hab. in foliis Parashoreae plicatae (Dipterocarpaceae), Rizal, Luzon, Ins. Philipp. (H. S. Yates).

4. **Pycnocarpon nodulosum** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 4983
562. — Membranis epiphyllis, primitus plus minus orbicularibus, dein pluribus confluentibus et tunc valde irregularibus, singulis 200-500 μ diam. majoribus usque 1-2 mm. diam., superficialibus planis, atris, sub microscopio pellucide brunneis, ex hyphis prosenchymatico-radiantibus 3-5 μ crassis creberrime septatis (articulis ubique 5-7 μ longis) strato singulo compositis; hyphis liberis membranas obtegentibus rectis, laxe rectangulariter v. fere rectangulariter et opposite ramosis, 3-5 μ crassis, septatis (articulis 14-25 μ long.) obscure castaneo-brunneis, noduliferis; nodulis hypharum sat numerosis, unilateralibus, hemisphaericis, 6-8 μ crassis; pycnotheciis plus minus numerosis in quaque membrana, minutis, orbi-

cularibus usque ellipticis, 100-140 μ diam., convexis, opacis v. fere opacis; sporidiis phaeodidymis (ut videtur).

Hab. in foliis Parinarii corymbosi (Rosaceae), Antipolo prov. Rizal, Ins. Philippin. (M. Ramos). — Ob hyphas noduliferas a *Pycn. magnifico* mox dignoscitur.

Subf. 6. Hemisphaerieae

Caracteres et dispositio systematica secundum v. Theissen

Hemisphaeriaceae Theiss., Ann. Mycol. II., 1913, p. 469; Mycol. Centralbl. 1913, p. 285. — Theissen et Sydow, Ann. Mycol. 15, 1917, p. 427.

Mycelium plerumque nullum, v. superficiale ramoso-reticulatum coloratum exhyphopodiatum. Ascomata superficialia scutata, contextu scutelli effuso-parenchymatico v. labyrinthiformi-plechtenchymatico; matura rotundato-aperta v. lacerata:

A. Scutellum laxe reticulatum, cyaneo-virescens, margine radianti; mycelium proprium nullum; hymenium simplex polyascum — Dictyopeltineae Theiss.

a) Sporidia continua hyalina — Dictyothyrina Th.

b) Sporidia hyalodidyma

1.) Scutellum poro centrali praeditum — Dictyothyrium Th.

2.) Scutellum poro destitutum — Dictyopeltis Th.

c) Sporidia 3-locularia hyalina — Dictyothyriella Rhem.

1.) Paraphyses praesentes — Micropeltis Mont.

2.) Paraphyses nullae — Micropeltella Syd.

d) Sporidia elongato-filiformia, septata — Scolecopeltis Speg. (= Scolecopeltopsis v. H.)

B. Scutellum pseudoparenchymaticum, brunneum, margine radianti; mycelium proprium nullum; hymenium simplex v. compositum, monascum, v. polyascum — Thrausmatopeltineae Theiss.

a) Hymenium singulum

1. Sporidia continua hyalina — Haplopeltis Th.

2. Sporidia hyalodidyma

α) Ascoma rotundatum, poro circulari nullo

* Paraphyses praesentes — Clypeolum Speg.

** Paraphyses nullae — Microthyriella v. H.

β) Ascoma lineare, longitudinaliter apertum — Schizothyrium Desm. (= Epipeltis Th.)

3. Sporidia hyalina plurilocularia — PHRAGMOTHYRIELLA v. H.

b) Hymenia plurima, contextu hypotheciali fibroso divisa

1. Hymenium singulum polyascum; sporidia hyalodidyma — POLYCLYPEOLUM Th.

2. Hymenium singulum monascum

*) Sporidia hyalodidyma — EREMOTHECA Th. et Syd.

**) Sporidia hyalophragmia — EREMOTHECELLA Syd.

C. Scutellum labyrinthiformi-plechtenchymaticum, centro apertum v. non; mycelium ramoso-reticulatum, exhyphopodiatum — PLOCHMOPELTINEAE Th.

a) Scutellum clausum; paraphyses nullae; hymenium monascum; sporidia hyalodidyma — PLOCHMOPELTIS Th.

b) Scutellum poro centrali praeditum; hymenium polyascum; sporidia hyalodidyma

1. Membrana setulis destituta

*) Paraphyses praesentes — STOMIOPELTIS Th.

**) Paraphyses nullae — STOMIOPELTELLA Th.

2. Membrana setulis praedita — CHAETOPELTOPSIS Th.

Trib. 1. **Dictyopeltinae** Theiss.

Sect. 1. Hyalosporae

DICTYOTHYRINA Theiss., Ann. Mycol. XI, 1913, p. 468. — Theiss. et Syd. in l. c., XV, 1917, p. 429. — Membrana distincte reticulata, viridi-cyanea, depressa, centro circulariter aperta. Hymenium simplex polyascum. Hypothecium tenue, hyalinum, fibrosum. Paraphyses praesentes. Epithecium nullum. Sporidia hyalina unilocularia.— Typ. gen. *Dict. fecunda* (Sacc. ut Myiocopron) Th., *D. atrocyanea* (Starb.) Th. 4984

Sect. 2. Hyalodidymae

DICTYOTHYRIUM Theiss., Oesterr. bot. Ztschr. 1912, p. 277. — Theiss. et Syd., Ann. Mycol. XV, 1917, p. 429.— Est *Dictyothyrina* hyalodidyma.

1. **Dictyothyrium giganteum** Syd., Philipp. Journ. of Bot. IX, 1914, n. 2, p. 178. — Peritheciis plerumque hypophyllis, sparsis, sine maculis, omnino superficialibus, sine mycelio, atris, opacis, rotundatis, 500-700 μ diam., carbonaceis, planis, centrum versus lenissime ele- 4985

vatis, poro rotundato distincto 25-35 μ lato instructis; contextu centrali omnino opaco obscure atro-coeruleo, peripherico laxiore dilutiore amoene coeruleo usque hyalino ex hyphis tenuissimis 1-1,5 μ latis dense ramosis et maeandrice conjunctis composito; ascis subsaccatis, ad basim latis apicem versus plerumque angustioribus, sessilibus, crasse tunicatis (praecipue ad apicem), 90-125 × 35-45, 2-4-sporis, copiosissime filiformiter paraphysatis; sporidiis oblongo-cylindraceis, utrinque late rotundatis, ad septum constrictis, hyalinis intus densissime granulosis 65-100 × 16-18, loculis sive aequalibus, sive quoad longitudinem inaequalibus.

Hab. in foliis Memecylonis lanceolati (Melastomataceae), socia *Morenoella Memecyli* Syd., Palawan, Taytay, Ins. Philipp. (MERRILL).

2. **Dictyothyrium leucopterum** Syd., Ann. Mycol. XIV, 1916, p. 93. — 4986
Peritheciis epiphyllis, sparsis, omnino superficialibus, sine mycelio, rotundatis, subcarbonaceis, planis, poro rotundo distincto 35-40 μ lato pertusis, 500-800 μ diam., ad marginem praeterea zona latissima hyalina 300-400 μ lata circumdatis; contextu centrali omnino opaco obscure atro-coeruleo, peripherico laxiore coeruleo ad marginem latissimum hyalino, ex hyphis tenuissimis 1-1,5 μ latis dense ramosis et maeandrice conjunctis composito; ascis obclavatis, apice rotundatis vel leniter attenuatis, copiose paraphysatis, 125-170 × 18-35, 2-3-4-6-sporis, raro 8-sporis; sporidiis plerumque distichis, variabilibus, primo minoribus 40-60 μ tantum longis, in maturitate usque 140 μ longis, 14-18 μ latis, hyalinis, 1-septatis, ad septum constrictis, plerumque inaequilateris, loculis plerumque valde inaequalibus, inferiore multo longiore, subinde etiam aequalibus.

Hab. in foliis Coccolobae (Polygonaceae), Seringal, S. Francisco, Rio Acre, Brasilia. (E. ULE). — Huc pertinet etiam *D. chalybaeum* (Rehm) Th., *D. subcyaneum* (E. et M.) Th., *D. giganteum* Syd.

DICTYOPELTIS Theiss., Ann. Mycol. XI, 1913, p. 468. — Theiss. et 1987
Syd., l. c., XV, 1917, p. 430. — Membrana astoma maturitate usque ad marginem disrupta. Paraphyses nullae. Caeterum ut *Dictyothyrium*. Typ. gen. *D. vulgaris* (Rac. ut Clypeolum) Theiss., *D. colubrina* (E. et K.) Theiss.

Sect. 5. Hyalophragmiae

MICROPELTIS Mont. — Syll. II p. 669. IX p. 1069, XI p. 381, XIV, p. 690, XVI p. 642, XVII p. 868, XXII p. 525.

1. **Micropeltis Semecarpi** Syd., Enum. Philipp. Fungi II, in Philipp. Journ. of Sci. VIII (1913) p. 488. — Peritheciis epiphyllis, sine maculis, in greges 1-4 cm. latos aequaliter densiusculeque dispositis, dimidiatis, centro elevatis, minute papillulatis et pertusis, discoideis, 200-240 μ diam., atris, glabris, contextu ex hyphis tenuibus, olivaceo-brunneis, flexuosis vel etiam ramosis, non vel vix septatis, 1-1,5 μ cr. subradiatim composito, margine plus minusve lato, albomembranaceo, tenuissimo cinctis; ascis cylindraceo-clavatis, apice obtusis, 45-55 × 8-11, octosporis, paraphysibus copiosis simplicibus filiformibus 50-60 × 0,75 obvallatis; sporidiis oblique monostichis vel distichis, fusoideis, primo 1-septatis dein 2-septatis, constrictis, hyalinis, utrinque obtusis, 15-18 × 3-5. 4988

Hab. in foliis Semecarpi cuneiformis (Anacardiaceae), Luzon, Manila, ins. Philipp. (MERRILL).

2. **Micropeltis borneensis** P. et H. Syd., Ann. Mycol. X, 1912, p. 81.— Peritheciis epiphyllis, sine maculis, sparsis, sessilibus, dimidiato-scutatis, membranaceis, mycelio carentibus, atris, 300-400 μ diam., centro papilla elevata praeditis, tandem e centro marginem versus dehiscentibus, contextu tenuissimo atro-coeruleo ad ambitum ex hyphis tenuibus dense intertextis anastomosantibus composito; ascis clavatis v. clavato-fusoideis, 45-60 × 12-17, octosporis, paraphysatis; sporidiis distichis v. conglobatis, fusiformibus, 5-septatis, ad septa constrictis, facile in loculos secedentibus, utrinque obtusis hyalinis, 20-25 × 4-5. 4989

Hab. in foliis vivis Anonaceae, Hayoep, Borneo sud-or. (H. WINKLER); in foliis Goniothalami Elmeri (Anonaceae), Mt. Maquiling, ins. Philipp. — Fm. sporidiis saepe 7-cellularibus in foliis Eugeniae sp. (Myrtaceae), Mt. Maquiling. — Fm. sporidiis saepius 5-cellularibus in foliis Fici caudatifoliae (Moraceae), Los Baños, Ins. Philipp. (C. F. BAKER).

3. **Micropeltis macromera** Syd., Ann. Mycol. XIV, 1916, p. 89. — Peritheciis epiphyllis, sparsis, orbicularibus, 600-800 μ diam., dimidiatis, centro elevatis, ostiolo ca. 25-30 μ lato rotundo pertusis, atris, glabris, contextu ex hyphis tenuibus, obscure atro-coeruleis flexuosis 1-1,5 μ latis subradiatim composito, margine angusto albomembranaceo tenuissimo cinctis, ascis fusoideis, octosporis, obtusis, 120-150 × 23-35, paraphysibus numerosis hyalinis, 1 μ crassis; sporidiis di-tristichis, fusoideis, semper biseptatis, constrictis, hyalinis, subrectis, 38-62 × 9-11, utrinque attenuatis, cellulis duabus extimis plerumque cuneatis et longioribus. 4990

Hab. in foliis Philodendri (Araceae), Seringal S. Francisco Rio Acre, Brasilia (E. Ule).

4. **Micropeltis epixyla** Sacc., Notae Mycol. XXIV p. 29 (Bull. Orto bot. Nap. 1918). — Peritheciis in ligno dealbato subsparsis, superficialibus, dimidiato-scutiformibus, subcircularibus, 90-150 μ diam., tenui-membranaceis, poro 25 μ lato pertusis, nigricantibus, contextu radiatim prosenchymatico, margine leviter denticulato; ascis fasciculatis, tereti-clavatis, 40-65 × 9, apice obtuso crassiuscule tunicatis, filiformi-paraphysatis, oligosporis (?); sporidiis distichis, fusoideis, utrinque obtusulis, saepe curvulis, 18-20 × 3-4, tetrablastis (an demum 3-septatis?) non constrictis, hyalinis. 4991

Hab. in ligno emortuo Coryli Avellanae (Betulaceae), Avellino, Ital. merid. — Specimina non omnino matura, sed species distincta videtur.

5. **Micropeltis Evonymi** Syd., Ann. Mycol. XV. 1917, p. 229. — Thyriothecia amphigena, plerumque hypophylla, sparsa, haud maculicola, orbicularia, 600-800 μ diam., opace atro-coerulee et reticulatim contexta, ad ambitum hyalino-marginata, poro rotundo 30-40 μ lato pertusa; asci sessiles, fusoidei vel ventricosi, 80-100 × 20-30, octospori paraphysati; sporae tereti-clavulatae, typice 3-septatae, vix vel leniter constrictae, hyalinae, superne late rotundatae, basim versus obtuse attenuatae, rectae vel curvatae, 25-30 × 7,5-9. 4992

Hab. in foliis Evonymi japonicae (Celastraceae), Mt. Maquiling prov. Laguna, Ins. Philipp. (C. F. Baker).

6. **Micropeltis corruscans** Rehm, Ascomyc. Philipp. II, in Philipp. Journ. of Sci. VIII (1913) p. 255. — Peritheciis in foliorum vivorum pagina inferiore decolorata crispataque gregarie sessilibus, dimidiato-scutatis, poro pertusis, centrifuge fusce contextis, glabris, ad marginem hyphis nonnullis septatis fuscidulis usque ad 25 μ longis obsessis, 100 μ diam.; ascis clavatis, sessilibus, octosporis, aparaphysatis, 30 × 10; sporidiis oblongis, obtusis, rectis, medio septatis non constrictis, utrinque biguttulatis, dein 4-locularibus, hyalinis, 9-12 × 3-3,5. 4993

Hab. in foliis Synedrellae nodiflorae (Compositae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (C. F. Baker).

7. **? Micropeltis pitya** Sacc., Ann. Mycol. XIII, n. 2 (1915) p. 117. — Peritheciis sparsis hypophyllis, superficialibus, secedentibus, nigris, dimidiato-scutatis, in sicco tumidatis convexo-hemisphaericis, 180-200 μ diam. contextu tenuissime celluloso, vix radiante, margine breviter fimbriato, ad centrum sensim extenuato, non vere ostio- 4994

lato; ascis ellipsoidis, basi sessilibus sed minus obtusis, 25 × 14-15, octosporis; sporidiis subtristichis, initio 1-septatis, hyalinis, maturis breviter fusoideis, 3-septatis, non constrictis, dilutissime viridulis, 14-15 × 4.

Hab. in foliis languidis Abietis balsameae (Coniferae), Tupper Lake N. Y. (House). — Species ob contextum perithecii vix radiantem dubiae sedis et alterius inquirenda in exemplaribus magis evolutis.

8. **Micropeltis Acalyphae** Syd., Ann. Mycol. XV, 1917, p. 229. — Thyriothecia epiphylla, sparsa, sine maculis, vix visibilia, orbicularia, 250-350 μ diam., reticulatim et intense caerulee contexta, praeterea margine hyalino usque 40 μ lato cincta, poro 15-20 μ lato pertusa, asci ventricosi vel subfusoidei, sessiles, 4-6-8-spori, 38-42 × 12-16; paraphyses tenues, filiformes, modice copiosae; sporae clavatae, superne late rotundatae, basim versus attenuatae, plerumque curvulae, hyalinae, 5-septatae, non vel vix constrictae, 20-25 × 4-5. 4995

Hab. in foliis Acalyphae stipulaceae (Euphorbiaceae), Los Baños, Ins. Philipp. (C. F. Baker).

9. **Micropeltis aequalis** Syd. in Leaflets of Philipp. Bot. V (1912) p. 1543. — Peritheciis amphigenis, praecipue epiphyllis, plerumque per totam folii superficiem aequaliter dispersis, superficialibus, dimidiato-scutatis, planis, 300-350 μ diam., atris, centro obsolete minutissimeque pertusis, ad marginem latiuscule albo-membranaceis, subiculo nullo, contextu fusco-coeruleo minutissime celluloso; ascis fusoideis vel clavato-fusoideis, subsessilibus, apice obtusis, 45-55 × 8-15, aparaphysatis, octosporis; sporidiis 2-3-stichis, tereti clavulatis, apice rotundatis et incrassatis, 3-septatis, leniter constrictis, hyalinis vel subhyalinis, 16-19 × 3,5-4. 4996

Hab. in foliis Actephilae dispersae (Euphorbiaceae), Brooks Point, Palawan, ins. Philipp. — *M. leucopterae* Penz. et Sacc. affinis; differt sporidiis latioribus.

10. **Micropeltis samarensis** Syd., Ann. Mycol. XV, 1917, p. 230.— Thyriothecia epiphylla, sparsa, orbicularia, scutata, 600-700 μ diam., poro centrali rotundo 30-35 μ lato pertusa, subatra, opaca marginem versus griseo-coeruleum pellucida, vix vel non albo marginata, contextu ut in reliquis generis speciebus; asci cylindraceo-clavati, ad apicem obtusi, breviter stipitati, 100-130 × 17-20, 4-8-spori, copiose paraphysati; sporae di-tristichae, fere vermiculares, rectae vel inaequilaterales, 6-7-septatae, ad omnia septa leniter constrictae, hyalinae, 48-60 × 6-8, cellula tertia superiore longiore et 4997

crassiore (usque 10 μ crassa).

Hab. in foliis Cyclostemonis sp. (Euphorbiaceae), Catubig River, Samar, Ins. Philipp. (M. Ramos). — *Microp. corynesporae* affinis.

11. **Micropeltis applanata**. — Syll. II, p. 669. — Var. **Galeariae** Sacc., 4998
Notae Mycol. XXIV, p. 12 (Bull. Orto bot. Napoli, 1918). — A typo distinguitur sporidiis plerumque 5-7-septatis, fusoideo-clavulatis, 24-30 × 4,5-5,5, ascis 6-8-sporis, filiformi-paraphysatis, 55-65 × 14-18, obclavatis; peritheciis 3-4 mm. lat., ostiolo eroso 100 μ diam.; contextu dense obscure celluloso, atro-fuligineo, non radiato.

Hab. in pag. imprimis super. foliorum adhuc viventium Galeariae affinis (Euphorbiaceae), Changi, Singapore (Baker). — Plures species affines: *M. Leoniae*, *M. Hirtellae*, *M. schmidtiana* etc.

12. **Micropeltis Rheediae** Rehm, Ann. Mycol. IX, 1911, p. 368. — Pe- 4999
ritheciis epiphyllis in maculis orbicularibus 0,5-2 cm. diam. fulvo-griseis, centrifuge pseudoparenchymatice flavidule contextis, gregariis, dimidiatis, orbicularibus, convexulis, poro pertusis, atris, glabris, parenchymatice nigro-coerulee contextis, ad marginem non radiantibus, c. 150 μ diam.; ascis fusiformibus, 40 × 12, octosporis; sporis fusoideis, rectis, transverse 5-septatis, hyalinis, 2-3-stichis 20 × 3; paraphysibus filiformibus, apice subcurvatis 1 μ.

Hab. ad folia Rheediae (Guttiferae), prope Para, Brasiliae (C. F. Baker). — Perithecia minutissima punctiformia; similis species *Micr. Xylopiae* Henn. quoad sporas. Plerumque in peritheciis modo sporulae hyalinae, cylindraceae, 3 × 1,5.

13. **Micropeltis leptosphaerioides** Speg., Mycet. Argent. VI, Anal. Mus. 5000
Nac. Buenos Aires XXIII (1912) p. 83. — Peritheciis saepius epiphyllis, hinc inde laxe gregariis, atris, glabris, dimidiato-scutatis, 250-400 μ diam., membranaceis, stellatim dehiscentibus, ambitu minute fimbriatis, contextu denso, tenuiter radiante, olivaceo, centro subopaco ambitu pellucido; ascis cylindraceo-obclavatis, breviter crasseque pedicellatis, ? aparaphysatis, 90-100 × 18-22; sporidiis subtristichis, e cylindraceo subclavatis, leniter curvulis, primo grosse 9-guttulatis dein 7-9 septatis, ad septa non vel lenissime constrictis, loculo quarto supero, Leptosphaeriarum more, caeteris conspicue majore, hyalinis, 30-40 × 8-9.

Hab. ad folia viva Ocoteae diospyrifoliae (Lauraceae), in silvis prope Calilegua, Jujuy, Argentina.

14. **Micropeltis trimera** Sacc., Notae Mycol. XXIV p. 13 (Bull. Orto 5001
bot. Napoli (1918). — Peritheciis remote sparsis, epiphyllis, dimi-

diatis, depresso-hemisphaericis, subcircularibus, superficialibus, 560-580 μ diam., poro centrali 18 μ diam. pertusis, nigris, contextu prosenchymatico, tortuoso subradianti, atro-fuligineo, in marginem pallidiorem latiusculum erosum extenuato; ascis clavato-cylindraceis, apice rotundatis, breviter stipitatis, filiformi-paraphysatis, 100-115 × 16, saepe curvulis, octosporis; sporidiis distichis, fusiformibus, utrinque acutulis, saepius curvulis, 35 × 8, subhyalinis, trilocularibus, non constrictis.

Hab. in foliis emortuis Gustaviae insignis cultae (Lecythidaceae), Singapore (Baker). — Affinis *M. mucosae* sed sporidiis fusiformibus, subhyalinis, ascis angustioribus etc. differt.

15. **Micropeltis similis** Syd., Ann. Mycol. XV, 1917, p. 230. — Thyriothecia in hypophyllo haud decolorato late dispersa, dimidiata, orbicularia, 500-700 μ diam., contextu reticulato opaco marginem versus sordide coerulescente praeterea zonula angusta hyalina mox evanida cincta, poro 20-30 μ lato aperta; asci fusiformes vel saccati aut ventricosi, sessiles, 80-90 × 20-25, octospori; paraphyses paucae, tenuiter filiformes; sporae distichae, clavatae, 5-septatae, non constrictae, 25-28 × 7-8, hyalinae, superne late rotundatae, basim versus attenuatae, cellulis duabus superioribus aequalibus et parum majoribus. 5002

Hab. in foliis Bauhiniae Cumingianae (Leguminosae), Los Baños, Ins. Philipp. (C. F. Baker).

16. **Micropeltis consimilis** Rehm, Ascomyc. Philipp. III, in Philipp. Journ. of Sci. VIII (1913) p. 394. — Peritheciis in utraque foliorum pagina immutata sparsis, sessilibus, ambitu circularibus, dimidiato-scutatis, poro pertusis, glabris, atro-violaceis, arcte reticulate contextis, haud radiatis, 200 μ diam.; ascis elongato-ovoideis, sessilibus, 70 × 12, octosporis, aparaphysatis; sporidiis clavatis, apice superiore obtuso, inferiore acutato, rectis, transverse plerumque 3-, interdum 4-septatis, cellula suprema plerumque majore, hyalinis, 20-25 × 5-6, distichis. 5003

Hab. in foliis Derridis (Leguminosae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (M. B. Raimundo). — Proximae videntur *M. distincta* Henn. et *M. aequalis* Syd.

17. **Micropeltis vagabunda** Speg. — Syll. XI p. 382 — var. **calamincola** Rehm, Ascomyc. Philipp. III, in Philipp. Journ. of Sci. VIII (1913) p. 394. — Peritheciis in foliis haud maculatis sparsis, amphigenis, dimidiato-scutatis, nigris, poro centrali pertusis, convexulis, faciliter ab epidermio solutis, glabris, 300 μ diam., intricato violacee con- 5004

textis, integre marginatis; ascis fusiformibus, sessilibus, octosporis, filiformi-paraphysatis, 50-60 × 10-12; sporidiis 2-3-stichis fusiformibus, utrinque acutatis, rectis, 3-septatis, non constrictis, hyalinis, 15 × 3-3,5.

Hab. in foliis ? C á l a m i (Palmae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (C. F. Baker).

18. **Micropeltis Pometiae** Rehm, Ascomyc. Philipp. V, Leaflets of Phi- 5005
lipp. Botany, VI (1914) p. 2229. — Peritheciis in epiphyllo pallidiore sparsis, sessilibus, dimidiato-scutatis, orbicularibus, nigris, glabris, convexulis, mox applanatis, minute papillatis, poro 30 μ lato pertusis, 0,5-1 mm. latis, contextu reticulato, violaceo, ad marginem integrum pallidiore, hyphis nullis excurrentibus cinctis; ascis oblongis, apice rotundatis, filiformi-paraphysatis, 100 × 15; sporidiis distichis, fusiformibus, utrinque acutatis, 3-septatis, hyalinis, 25-30 × 5-6.

Hab. in foliis P o m é t i a e p i n n a t a e (Sapindaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (C. F. Baker).

19. **Micropeltis rhopaloides** Syd., Ann. Mycol. XV, 1917, p. 230. — Thy- 5006
riothecia sparsa, amphigena, plerumque hypophylla, 400-600 μ diam., poro rotundo 25-40 μ lato pertusa, contextu generis, omnino opaco, atro-coeruleo, membrana hyalina ad marginem non vel vix evoluta; asci fusoidei, sessiles, paraphysati, 80-115 × 20-24, 4-8-spori; sporae clavatae, superne late rotundatae, basim versus angustatae, sed una basi obtusae, 4-5 septatae, tandem leniter constrictae, hyalinae, 26-35 × 8-9, cellulis duabus superioribus multo majoribus.

Hab. in foliis P a l a q u i i sp. (Sapotaceae), Mt. Maquiling, Ins. Philipp. (C. F. Baker).

20. **Micropeltis aeruginascens** Rehm, Ascomyc. Philipp. V, Leaflets of 5007
Philipp. Botany, VI (1914) p. 2228. — Ita vocanda *M. applanata* Rehm (Philipp. Journ. Sci. VIII p. 394) non Mont.

MICROPELTELLA Syd., Ann. Mycol. XI, 1913, p. 404 (Etym. a *Micropeltide*, cui affine genus). — Characteres *Micropeltidis* sed defectu paraphysium diversa.

1. **Micropeltella Merrillii** Syd., Philipp. Journ. of Sc. Sect. Bot., IX, 5008
1914, p. 178. — Peritheciis amphigenis, sine maculis, sparsis, superficialibus, facile secedentibus, opace atro-coeruleis lenticulari-scutatis, 250-420 μ diam. marginem versus coerulee pellucidis ibique ex hyphis 1-1,5 μ latis maeandrice denseque conjunctis contextis, praeterea margine hyalino cinctis, ostiolo distincto rotun-

dato 20-25 μ lato; ascis fusoideo-clavatis, sessilibus, aparaphysatis, 60-75 × 14-18, plerumque octosporis; sporidiis distichis, tereti-clavulatis, apice late rotundatis deorsum attenuatis, rectis vel leniter curvatis, 3-4-septatis, ad septa parum constrictis, hyalinis, 24-30 × 4-6.

Hab. in foliis Schefflerae (Araliaceae), Glycosmidis cochinchinensis (Rutaceae), Celastri paniculati (Celastraceae), Palawan, Taytay, Ins. Philippin. (MERRILL).

2. **Micropeltella Ramosii** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 562. — Peritheciis hypophyllis, sparsis, sine maculis, superficialibus, facile secedentibus, rotundatis, 700-1000 μ diam., lenticulari-scutatis, opace atro-coeruleis, subcarbonaceis, marginem versus pellucidis ibique ex hyphis 1-1,5 μ latis maeandrice denseque conjunctis contextis, praeterea margine angusto subhyalino cinctis, ostiolo rotundo 30-35 μ lato pertusis; ascis clavatis v. fusiformibus, aparaphysatis, 70-90 × 16-20, 4-6-8-sporis, sporidiis crasse vermiformibus, utrinque late rotundatis, rectis v. inaequilateris, deorsum parum tantum attenuatis, 5-6-septatis, non constrictis, hyalinis, 32-38 × 9-11. 5009

Hab. in foliis Cyclostemonis microphylli (Euphorbiaceae), pr. Angat prov. Bulacan, Ins. Philippin. (M. RAMOS).

3. **Micropeltella paetensis** Syd., Ann. Mycol. XV, 1917, p. 229. — Peritheciis epiphyllis, sine maculis, sparsis, orbicularibus, 600-800 μ diam., reticulatim contextis, atro-caeruleis, margine hyalino nullo, poro 20-30 μ lato apertis; ascis fusoideis v. cylindraceis, aparaphysatis, 4-8-sporis, 95-120 × 18-20; sporidiis fusoideo-clavatis, 6-8-septatis, non v. leniter constrictis, tandem in loculos secedentibus, 46-60 × 8-10, loculis mediis minoribus. 5010

Hab. in foliis Dichapetali sp. (Dichapetalaceae), pr. Paete, prov. Laguna et in foliis Garciniae venulosae (Guttiferae), M. Maquiling prov. Laguna, Ins. Philipp. (BAKER).

4. **Micropeltella agusanensis** Syd., Ann. Mycol. XV, 1917, p. 229. — Thyriothecia hypophylla, folio immaculato insidentia, dispersa, orbicularia, 500-800 μ diam., atro-coerulea, opaca, ad marginem tantum pellucida et subhyalina, contextu solito generis, poro rotundo 25-35 μ lato pertusis; asci aparaphysati, sessiles, plerumque saccati, 60-70 × 18-22, octospori; sporae obclavatae, superne late rotundatae, basim versus attenuatae, 5-6-septatae, non constrictae, hyalinae, 24-28 × 6-8, cellulis fere aequalibus. 5011

Hab. in foliis Parkiae Sherfeseei (Leguminosae), Agusan, Mindanao, Ins. Philipp. (M. S. RAZON, SHERFESEE).

5. **Micropeltella clavispora** Syd., Ann. Mycol. XI, 1913, p. 404. — Peritheciis hypophyllis, sine maculis, sparsis, superficialibus, facile secedentibus, opace atro-coeruleis, lenticulari-scutatis, margine alatis, 500-800 μ diam., opace carbonaceis, marginem versus coerulee pellucidis ibique ex hyphis 1-2 μ latis tenuibus maeandrice denseque conjunctis contextis, praeterea margine ca. 25-40 μ lato hyalino ex hyphis 1-2 μ latis anastomosantibus composito cinctis, ostiolo distincto, rotundato, 30-40 μ lato; ascis clavatis vel fusoideo-clavatis, sessilibus, aparaphysatis, 90-110 × 15-20, apice rotundatis, 4-8-sporis; sporidiis plerumque distichis, clavulatis vel fusoideo-clavulatis, in maturitate 4-5-septatis, apice late rotundatis, basi rotundatis vel leniter attenuatis, rectis vel leniter curvatis, hyalinis vel subhyalinis, in maturitate ad septa constrictis, 25-37 × 6,5-9-5, parte superiore, deorsum versus angustioribus. 5012

Hab. in foliis Memecyli lanceolati (Melastomataceae), prov. Pangasinaman ins. Luzon, Philippin. (J. Agama).

6. **Micropeltella maquilingiana** Syd., Ann. Mycol. XV, 1917, p. 228. — Thyriothecia in epiphyllo immutato late dispersa, dimidiata, 600-850 μ diam., orbicularia reticulatim coerulee contexta, ad marginem zonula hyalina usque 30 μ lata cincta, poro minutissimo ca. 10 μ lato pertusa; asci fusiformes, sessiles, aparaphysati, 50-55 × 12-15, 8-demum plerumque 4-spori; sporae subclavatae, rectae, 5-7-septatae, 35-40 × 4-5, hyalinae, cellula suprema latiore et 10-12 μ longa. 5013

Hab. in foliis Aglaiae diffusae (Meliaceae), Mt. Maquiling, Laguna Philipp. (C. F. Baker).

7. **Micropeltella camarinensis** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 561. — Peritheciis epiphyllis, sparsis, superficialibus, facile secedentibus, orbicularibus, 450-650 μ diam., atro-coeruleis, opacis, marginem versus pellucide coeruleis, ex hyphis 1-1,5 μ latis tenuibus maeandrice denseque conjunctis contextis, ostiolo rotundato 20-30 μ lato pertusis; ascis fusoideo-clavatis, sessilibus, octosporis, aparaphysatis, 85-120 × 20-27; sporis plerumque distichis, subinde tristichis, tereti-clavulatis, apice rotundatis, deorsum attenuatis, rectis v. curvatis, semper 2-septatis, constrictis, hyalinis, 36-42 × 8-10. 5014

Hab. in foliis Lansii dubii (Meliaceae), Mount Isarong pr. Camarines Luzon, Ins. Philippin. (H. M. Curran).

8. **Micropeltella megasperma** Syd., Enum. Philipp. Fungi II, in Philipp. Journ. of Sci. VIII (1913) p. 487. — Peritheciis epiphyllis, sparsis, superficialibus, atris, opacis, orbicularibus, 500-900 μ diam., alato-scutatis, marginem versus pellucide coeruleis ibique ex hyphis ca. 5015

1,5 μ latis maeandrice curvatis dense intertextis compositis, praeterea zona tenuissima membranacea hyalina plus minus lata (40-60 μ) saepe latissima (usque ad 160 μ) ex hyphis tenuissimis ca. 1 μ cr. composita cinctis, ostiolo rotundato, 20-25 μ lato, distincto; ascis sessilibus, fusiformi-clavatis vel cylindraceo-clavatis, crasse tunicatis, 150-200 × 26-35, aparaphysatis, 2-8-sporis; sporidiis distichis, oblongo-fusoideis, 2-septatis, raro 3-septatis (septis crassis), hyalinis, 65-75 × 10-16, cellulis subaequilongis, cellula superiore latiore, intus minute granulosis.

Hab. in foliis vivis Eugeniae sp. (Myrtaceae), Luzon, Prov. Laguna, St. Antonio, ins. Philipp. — *M. bogoriensi* v. Höhn. proxima.

9. **Micropeltella ? maxima** Spegaz., Fungi Costaric. nonn. in Bol. Ac. Nac. Cienc. Cordoba, t. 23, Extr. p. 213. — Maculae nullae; thyriothecia, membrana basali et margine hyalino destituta, orbicularia maxima 1-2 mm. diam., ostiolo rotundo majusculo (60 μ) pertusa, ambitu vix denticulata, glaberrima, atra fere opaca, dense minuteque sinuoso-prosenchymatica; asci subfusoidei maximi, 180-200 × 25-30, saepius tetraspori aparaphysati v. pseudoparaphysibus paucis crassis commixti; sporae hyalinae, oblique monostichae, anguste fusoideo-subclavulatae maximae, 80-85 × 10-12, tetramerae, articulis isomacriis, primo tunica mucosa tenui junctis, serius nudis ac liberis. 5016

Hab. in foliis vivis Piperis speciei ignotae (Piperaceae), prope S. Josè Costarica, America trop.

10. **Micropeltella microsperma** Syd., Ann. Mycol. XIV, 1916, p. 89. — Peritheciis hypophyllis, sparsis vel laxe aggregatis, orbicularibus, ambitu subinde lobulatis, 270-320 μ diam., poro rotundo 25-30 μ lato pertusis, contextu flavo-brunneolo ex hyphis 1,5 μ crassis maeandrice curvatis composito, membrana hyalina nulla cinctis; ascis aparaphysatis, cylindraceo-clavatis, breviter stipitatis, 70-95 × 12-14, octosporis, sporidiis distichis, obclavatis, basi late rotundatis, cellula superiore attenuatis, 2-septatis, non constrictis, hyalinis, cellulis duabus extimis 1-2 guttulatis, media non guttulata, 17-20 × 3-3,5. 5017

Hab. in foliis Uncariae guyanensis (Rubiaceae), Seringal Auristella, Rio Acre, Peruvia (E. Ule).

11. **Micropeltella acrensis** Syd., Ann. Mycol. XIV, 1916, p. 89. — Peritheciis sparsis, rotundatis, 400-450 μ diam., poro minuto rotundo pertusis, contextu griseo-coeruleo ex hyphis tenuissimis 1-1,5 μ crassis composito, ambitu zona angusta hyalina cinctis; ascis ob- 5018

clavatis, sessilibus, aparaphysatis, 60-75 × 14-16, 4-6-8-sporis; sporidiis oblique monostichis usque distichis, fusoideo-clavatis, ad apicem obtuse attenuatis, basim versus sensim attenuatis, 4-5-septatis, non constrictis, hyalinis, 30-36 × 4-5.

Hab. in foliis Sapotaceae, Seringal, S. Francisco, Rio Acre, Brasilia (E. Ule).

12. **Micropeltella bogoriensis** (v. Höhn.) Sydow, l. c., *Micropeltis bogoriensis* v. Höhn., Fragm. z. Mykol. 725, Sitzsb. Akad. Wiss. Wien CXXI, i, p. 346 (1912). — Peritheciis hypophyllis, sparsis, vel laxe gregariis superficialibus, opace caeruleo-atris, inferne lenticularibus et hyalinis, superne circulari-clypeiformibus, 400-700 μ latis, opaco-carbonaceis, ad marginem caeruleo-pellucidis ibique ex hyphis 1.5-2 μ cr. maeandrice contextis compositis, margine hyalino 40 μ circ. lato praeditis; ostiolo irregulariter circulari, 25 μ lato; ascis sessilibus, fusoideo-clavatis, apice rotundatis et crasse tunicatis, 2-8-sporis, 125-140 × 22-25, paraphysibus nullis; sporidiis distichis, hyalinis, fusoideis vel clavato-oblongis, plerumque paullo curvatis, 3-4-cellularibus, granuloso-farctis, 42-54 × 7-12, loculo centrali cylindraceo, loculis apicalibus conoideo-rotundatis. 5019

Hab. in foliis coriaceis arboris indet., Buitenzorg, Java.

DICTYOTHYRIELLA Rehm, Broteria XII, 1914, p. 92. — Theiss. et Syd., Ann. Mycol. XV, 1917, p. 430. — Est *Micropeltis* sporidiis triloculatis.

1. **Dictyothyriella Trewiae** Syd., Ann. Mycol. XV, 1917, p. 231. — Thyriothecia in epiphyllo haud decolorato late dispersa, orbicularia, 300-350 μ diam., reticulatim contexta, atro-coerulea, poro aperta, asci clavati vel fusoidei, sessiles, 45-55 × 12-15, octospori, ut videtur parce paraphysati; sporae distichae oblongae, semper 2-septatae, hyalinae, in maturitate constrictae, 13-17 × 4,5-5. 5020

Hab. in foliis Trewiae ambiguae (Euphorbiaceae), Mt. Maquiling prov. Laguna, Ins. Philipp. (C. F. Baker).

2. **Dictyothyriella heterosperma** Syd., Ann. Mycol. XV, 1917, p. 231.— Thyriothecia in epiphyllo immutato dispersa, dimidiata, orbicularia, 700-1000 μ diam., reticulatim contexta, atro-coerulea, opaca, ad marginem tantum pellucida, praeterea zonula hyalina usque 40 μ lata cincta, poro 25-35 μ lato rotundo aperta; asci fusiformes vel obclavati aut cylindracei, sessiles, 130-170 × 22-26, paraphysati, 4-8-spori, J — ; sporae fusoideae, utrinque acutae, hyalinae, plerumque 2-septatae, variabiles, constrictae, 50-72 × 7-10, tandem in lo- 5021

culos secedentes, loculo supero plerumque majore 25-40 μ longo.

Hab. in foliis Malloti Cumingii (Euphorbiaceae), Los Baños, Ins. Philipp. (C. F. Baker), Knemae heterophyllae (Myristicaceae), Mt. Maquiling et Nephelii mutabilis (Sapindaceae), Diospyri sp. (Ebenaceae), M. Maquiling pr. Laguna (Baker), Fici longicaudati (Moraceae), Los Baños (C. F. Baker).

3. **Dictyothyriella Bauhiniae** (Rehm) Theiss. et Syd., Ann. Mycol. XV, 1917, p. 430, *Micropeltis Bauhiniae* Rehm, Ascomyc. Philipp. IV, Leaflets of Philipp. Botany, VI (1913) p. 1945. — Peritheciis epiphyllis, non maculicolis, sparsis, dimidiato-scutatis, poro pertusis, nigris, glabris, 200 μ latis, intricato-contextis, fuscis, ad marginem hyalinis, hyphis radiantibus carentibus; ascis oblongis, late sessilibus, apice rotundatis, crasse tunicatis, 30-35 × 9, paraphysibus filiformibus 2 μ cr. obvallatis; sporidiis (modo intra ascos vivis) distichis, clavatis, 2-septatis, cellula suprema multo majore, rectis, hyalinis, 10-12 × 3. 5022

Hab. in foliis Bauhiniae cumingianae (Leguminosae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (C. F. Baker).

4. **Dictyothyriella mucosa** (Syd.) Sydow, Ann. Mycol. XV, 1917, p. 231, *Micropeltis muc.* Syd., Ann. Mycol. XIV, 1916, p. 364. — Hypophylla, sine maculis, sparsa; peritheciis orbicularibus, superficialibus, 350-600 μ diam., atro-coeruleis, ad marginem pellucide coeruleis, ex hyphis 1 μ latis tenuibus maeandrice denseque conjunctis contextis, peripherice praeterea zonula angusta hyalina cinctis, ostiolo rotundato 25-30 μ lato pertusis; ascis clavatis, subcylindraceis vel saccatis, superne rotundatis, stipite brevissimo praeditis, 2-4-6-8-sporis, 75-120 × 20-26; paraphysibus copiosissimis, tenerrimis, copiose patenti-ramosis, sporidiis 1-3-stichis, clavatis, hyalinis, typice 2-septatis, 30-38 × 8-10, strato mucoso hyalino cinctis, rectis vel curvatis, cellula superiore majore obtuse attenuata, media subquadratica, inferiore angustiore sed longiore. 5023

Hab. in foliis Coffeae excelsae (Rubiaceae), Los Baños, ins. Philipp. (C. F. Baker).

Sect. 6. Scolecosporae

SCOLECOPELTIS Speg. — Syll. IX p. 1072, ~~XIV~~ XVI p. 646, XVII p. 874, XXII p. 533. — Syn. *Scolecopeltis* v. Höhn. 1909, Syll. XXII p. 534.

1. **Scolecopeltis Garciniae** Rehm, Ascomyc. Philipp. IV, Leaflets of Phy- 5024

lipp. Botany, VI (1913) p. 1946. — Peritheciis in pagina superiore foliorum haud decolorata insidentibus, sparsis, sessilibus, discoidalibus, dimidiato-scutatis, poro perspicuo pertusis, nigris, 1 mm. usque latis, ex hyphis 1-1,5 μ latis fuscis intricato-centrifuge contextis, ad marginem hyphis vix radiantibus, subhyalinis; ascis subfusiformibus, sessilibus, crasse tunicatis, 120-130 × 20-25, paraphysibus tenerrimis, vix 1 μ cr. intermixtis; sporidiis parallele dispositis, vermicularibus, utrinque subobtusis, 18-locularibus, ad septa subconstrictis, hyalinis, 100 × 5-6.

Hab. in foliis Garciniae venulosae (Guttiferae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (S. A. Reyes). — Sporidia immatura modo in asco recognita.

2. **Scolecopeltis Bakeri** Syd., Ann. Mycol. XV, 1917, p. 232. — Thyriothecia hypophylla sine maculis, sparsa dimidiata, orbicularia, 0,5-0,8 mm. diam., reticulatim-coerulee contexta, ad marginem non vel vix hyalina, centro subopaca, poro ca. 30-35 μ lato pertusa; asci oblongo-fusiformes, sessiles, 110-170 × 20-25, 4-8-spori, paraphysati, sporae subcylindraceae, utrinque leniter attenuatae, hyalinae, 10-12-septatae, usque 120 μ longae, 7-10 μ crassae, jam intra ascos in articulos secedentes, articulis mediocribus majoribus (10-12 μ longis). 5025

Hab. in foliis Aglaiae Harmsianae (Meliaceae), Mt. Maquiling, Celtidis philippinensis (Ulmaceae), Los Baños et Tetrastigmatis sepulchrae (Vitaceae), Mt. Maquiling (C. F. Baker).

3. **Scolecopeltis Connari** Syd., Ann. Mycol. XV, 1917, p. 232. — Thyriothecia in hypophyllo immutato sparsa, dimidiata, orbicularia, 400-500 μ diam., reticulatim coerulee contexta, zonula hyalina usque 30 μ lata circumdata, poro 20 μ lato pertusa; asci fusiformes, 80-125 × 22-28, octospori, paraphysati, J —; sporae 2-3-stichae, cylindraceo-clavatae, rectae, 6-7-septae, 50-65 × 6-7, mox in articulos saepe valde inaequales secedentes, hyalinae. 5026

Hab. in foliis Connari neurocalycis (Rosaceae), pr. Paete, Laguna, Ins. Philipp. (C. F. Baker).

Trib. 2. Thrausmatopeltinaee Theiss.

Sect. 1. Hyalosporae

HAPLOPELTIS Theiss., Broteria XII, 1914, p. 88. — Theiss. et Syd., Ann. Mycol. XV, 1917, p. 430. — Membrana brunnea, contextu

polygonali donata, margine ex hyphis elongatis fibrillosa, mycelio proprio nullo praedita, poro centrali circulari. Hymenium simplex polyascum. Paraphyses nullae. Sporidia unilocularia hyalina.

1. **Haplopeltis bakeriana** (Rehm) Theiss. l. c., *Myiocopron bakerianum* 5027
Rehm, Ascomyc. Philipp. III, in Philipp. Journ. of Sci. VIII (1913) p. 393. — Peritheciis scutato-dimidiatis, orbicularibus, convexulis, distincte minute papillulatis, poro pertusis, nigris, 250-300 μ latis, singularibus, mox in maculas nigritulas late effusas confluentibus, parenchymatice fusce contextis, ad marginem hyphis paucis fuscidulis radiantibus; ascis clavatis, apice rotundatis, sessilibus, 50 × 10-12, octosporis, aparaphysatis; sporidiis distichis, ellipsoideis, rectis, 1-cellularibus, non guttatis, hyalinis, 12-15 × 5.

Hab. in ramis putrescentibus Passiflorae quadrangularis (Passifloraceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (C. F. Baker). — Ascis clavatis, non ovoideis et sporidiis ellipsoideis praecipue dignoscenda. A proxima *H. millepunctata* (Penz. et Sacc.) distinguitur papillis evidentibus.

Sect. 2. Hyalodidymae

MICROTHYRIELLA v. Höhnel, Fragm. z. Myk. VI, 1909, p. 244. — Theiss. et Syd., Ann. Mycol. XV, 1917, p. 431. — *Microthyrium* Syll. XXII p. 517. — A *Clypeolo* differt paraphysibus nullis. — Typ. gen. *Micr. Rickii* (Rehm) v. Höhn. l. c.

1. **Microthyriella philippinensis** Syd., Ann. Mycol. XI, 1913, p. 405, XV, 502
1917, p. 235. — Peritheciis epiphyllis, singulis etiam hypophyllis, sine maculis et sine mycelio, orbicularibus, sparsis, 150-400 μ diam., omnino superficialibus, tenuissimis, planis, scutato-dimidiatis, atris, haud ostiolatis, pariete superiore tantum bene evoluto ex uno strato cellularum quadratarum vel varie angulatarum saepe irregularium 3,5-5 μ latarum obscure olivaceo-brunnearum composito, margine angusto hyalino tenuissimo cinctis; ascis copiosis, sessilibus, globosis, subglobosis vel ovatis, 34-46 × 25-34, octosporis; paraphysibus irregulariter ramosis, haud typicis, plectenchymatice connatis, submucosis; sporidiis parallele positis, oblongo-fusiformibus, utrinque rotundatis vel cellula basali saepe attenuatis, medio 1-septatis et non constrictis, hyalinis, 18-26 × 9-10, cellula superiore saepe paullo latiore.

Hab. in foliis vivis Aglaonematis (Araceae), Lepisanthis schizolepis (Sapindaceae), Evonymi japonici

(Celastraceae), Bauhiniae Cumingianae (Leguminosae), Los Baños ins. Philippinensium (S. A. Reyes, C. F. Baker).

2. **Microthyriella uleana** Syd., Ann. Mycol. XIV, 1916, p. 89. — Peritheciis epiphyllis, mycelio nullo, superficialibus, orbicularibus, sparsis, 150-250 μ diam., tenuissimis, planis, scutato-dimidiatis, atris, haud ostiolatis, pariete superiore tantum bene evoluto ex uno strato cellularum quadratarum vel varie angulatarum 3,5-5 μ latarum olivaceo-brunnearum composito, margine angusto hyalino tenuissimo cinctis; ascis sessilibus, subglobosis vel ovato-globosis, 50-65 × 40-45, octosporis; paraphysibus genuinis nullis; sporidiis parallele positis, fusiformibus, rectis vel inaequilateris, utrinque obtuse attenuatis, medio 1-septatis et vix vel leniter constrictis, hyalinis, 35-42 × 8-11. 5029

Hab. in foliis Hippocrateae, Seringal Auristella, Rio Acre, Peruviae (E. Ule).

POLYCLYPEOLUM Theiss., Ann. Myc. XII, 1914, p. 67. — Theiss. et Sydow, l. c. XV, 1917, p. 431. — Est *Microthyriella* astoma aparaphysata. Disci ascigeri plurimi. Sporidia hyalodidyma. — Typ. gen. *Pol. Abietis* (v. Höhn. ut Polystomella) Th., l. c. 5030

SCHIZOTHYRIUM Desm. — Syll. II p. 723, IX p. 1100, XIV p. 710, XVI p. 657, XVII p. 892, XXII p. 557. — Syn. *Epipeltis* Theiss., Abh. zool.-bot. Ges. Wien. Bd. VII, 1913, N. 3., p. 30.

1. **Schizothyrium annuliforme** Syd. et Butl., Ann. Mycol. IX, 1911, p. 376. — Stromatibus epiphyllis, maculis majusculis decoloratis indeterminatis effusis insidentibus plerumque concentrice v. annulatim dispositis saepissime biformibus, interioribus majoribus et 2-4 mm. longis subinde confluentibus, marginalibus minoribus 0,5-1,5 mm. diam., rotundatis v. oblongis, confluendo subinde irregularibus, basi immersis, planis, atris, rimis elongatis apertis; ascis clavatis, deorsum in stipitem longissimum attenuatis, superne obtusis, cum stipite 75-130 × 10-13, p. sp. 30-50 μ longa, octosporis; paraphysibus filiformibus, paucis; sporidiis subdistichis, oblongo-ellipsoideis v. oblongis, utrinque rotundatis, continuis, hyalinis v. subhyalinis, 10-15 × 3-5. 5031

Hab. in foliis vivis Aceris oblongi (Aceraceae), Mussoorie Indiae or. (E. J. Butler). — Dubium an gen. *Schizothyrio* adscribenda species, certo *Criellae Aceris-laurini* (Pat.) Sacc. et Syd. et *Schizothyrii Aceris* (P. Henn. et Lind.) Pat. diversa.

EREMOTHECA Theiss. et Syd., Ann. Mycol. XV, 1917, p. 235 et p. 431. — A *Eremothecella* differt praecipue sporidiis hyalodidymis.— Sec. v. Höhnel (Ber. Deutsch. Bot. Ges. 36., 1918, p. 32) gen. *Eremotheca* ut synon. gen. *Microthyriellae* v. H. habendum.

1. **Eremotheca philippinensis** Syd., Ann. Mycol. 15., 1917, p. 235 – ? Syn. 5032 *Rhytisma rufulum* B. et C., Syll. VIII p. 757. — Thyriothecia in epiphyllo haud maculato late dispersa, plana, orbicularia, 1 mm. diam., haud papillulata, parenchymatice e cellulis 3-4 ⌀ 2-3 contexta, brunneola, ad marginem 30-50 μ late hyaline marginata; asci ovati vel ovato-globosi, 70-80 ⌀ 30-55, crassiuscule tunicati, 8-spori, aparaphysati J —; sporae oblongae, rectae vel inaequilateres, hyalinae, medio septatae, non constrictae, utrinque obtusae, 42-55 ⌀ 12-14.

Hab. in foliis Celtidis philippinensis (Ulmaceae), Los Baños, Laguna, Strombosiae philippinensis (Olacaceae), Mt. Maquiling Ins. Philipp., Garciniae venulosae (Guttiferae), et Xanthophylli sp. (Polygalaceae), (C. F. Baker). — Sec. v. Höhnel (Ber. Deutsch. Bot. Ges. 36., 1918, p. 312) *Microthyriellae* species haec ut synon. *macrosporae* v. Höhn. habenda.

Sect. 3. Hyalophragmiae

PHRAGMOTHYRIELLA v. Höhn., Fragm. z. Myk. XIV, 1912, n. 725.— Theiss. et Syd., Ann. Myc. XV, 1917, p. 431. — A gen. *Micropeltis* differt peritheciis contextu e cellulis parvulis non radiantibus nec marginem excedentibus composito; cetera conformia; a *Microthyriella* sporidia hyalophragmia. — Typ. gen. *Phr. molleriana* (Sacc.) v. Höhn., *Phr. orbicularis* (Zimm.) v. Höhn.

1. **Phragmothyriella Bakeri** Rehm, Ascom. Philipp. V, p. 2230 (1914) 5033 cfr. v. Höhn., Fragm. Mycol. p. 8.— Peritheciis gregariis, sessilibus, dimidiato-scutellatis, glabris, nigris, 200 μ diam., poro orbiculari 20 μ diam., lato pertusis, contextu pseudoparenchymatico fusco ex cellulis parvulis, non radiantibus nec marginem excedentibus formato; ascis clavatis 70 ⌀ 9, octosporis; sporidiis fusoideis, rectis, 5-septatis, non constrictis, hyalinis, distichis, 15-20 ⌀ 4; paraphysibus filiformibus.

Hab. ad folia Schizostachyi emortui (Graminaceae), et Eugeniae (Myrtaceae), Los Baños; Luzon ex Philipp. (Reyes, Baker).

EREMOTHECELLA Sydow, Ann. Mycol. XV, 1917, p. 236. — Thyriothecia irregulariter pseudoparenchymatice contexta, fuscidula, mycelio nullo ; hymenia in quoque thyriothecio, monasca. Asci ovato-globosi, aparaphysati. Sporidia oblongo-clavata, hyalina, transverse pluriseptata.

1. **Eremothecella calamicola** Syd., l. c. — Thyriothecia epiphylla, dispersa vel laxe aggregata orbicularia, 400-800 μ diam., fuscidula, irregulariter parenchymatice contexta, marginem versus contextu plus minus radiante et dilutiore, saepe subhyalino, poro carentia ; hymenia per totum thyriothecium dispersa, monoasca ; asci subglobosi, 40-52 × 32-40, octospori ; sporae oblongo-clavatae, immaturae breviores et 3-4-septatae, maturae longiores et 5-6-septatae, constrictae, rectae vel saepius leniter curvatae, cellula superiore et subinde etiam secunda plus minus majore, utrinque rotundatae, 28-35 μ longae, superne 9-11 μ latae, inferne 5-7 μ latae. 5034

Hab. in foliis Calami sp. (Palmae), Mt. Maquiling, Laguna, Ins. Philipp. (C. F. Baker). — Sec. v. Höhnel (Ber. Deutsch. Bot. Ges. 36., 1918, p. 312) est Lichen (= Arthoniopsis Müll., sec. Zahlbruckner

Trib. 3. **Plochmopeltineae**

PLOCHMOPELTIS Theiss., Broteria XII, 1914, fasc. 2., p. 87. — Theiss. et Syd., Ann. Mycol. XV, 1917, p. 432. — Mycelium reticulatum septatum, exhyphopodiatum, subhyalinum. Thyriothecia astoma, contextu floccoso-meandriformi. Hymenium monascum. Asci subglobosi aparaphysati. Sporidia hyalodidyma. — Typ. gen. *Pl. intricata* (E. et M. ut Asterina) Theiss. l. c. 5035

STOMIOPELTIS Theiss., Broteria XII, 1914, p. 85. — Theiss. et Sydow, Ann. Mycol. XV, 1917, p. 432. — A *Plochmopeltis* differt thyriotheciis poro centrali praeditis, hymenio polyasco, paraphysibus praesentibus. Sporidia hyalodidyma. — Typ. gen. *Stom. aspersa* (Berk. ut Asterina) Th., l. c. 5036

STOMIOPELTELLA Theiss., Broteria XII, 1914, p. 86.— Theiss. et Syd., Ann. Mycol. XV, 1917, p. 432. — Est *Stomiopeltis* paraphysibus destitutum. — Typ. gen. *Stom. nubecula* (B. et C. ut Asterina) Th. l. c., *St. patagonica* (Speg. ut Microthyrium) Th., l. c. 5037

CHAETOPELTOPSIS Theiss., Ann. Mycol. XI, 1913, p. 496. — Theiss. 5038
et Sydow, Ann. Mycol. XV, 1917, p. 432. — Mycelium reticulatum, pallide brunneolum, septatum, exhyphopodiatum. Thyriothecia contextu floccoso-meandriformi, brunnea, setulis acutis brunneis septatis praedita, poro centrali praedita. Hymenium simplex aparaphysatum. Asci ovato-clavati supra incrassati, octospori. Sporidia hyalina bilocularia. — Typ. gen. *Chaet. tenuissima* (Petch ut Asterina) Th., l. c.

Genera incertae sedis

ACTINOPELTE Sacc., Ann. Mycol. XI, 1913, p. 315 (Etym. *actin* radius et *pelte* scutum). — Perithecia superficialia, dimidiata, plano-convexa, membranacea, atra, poro pertusa, ambitu subcircularia, contextu eximie radiato, margine profunde fimbriato-fisso, cellulis furcato-ramosis, marginalibus liberis et spinuliformibus, appressis. Asci pauci (6-9) breviter ovato-ellipsoidei, monospori, breviter crassiuscule stipitati. Sporidia ascum implentia, continua, nubilosa, subhyalina. — Notis datis et imprimis ascis majusculis, monosporis, genus, ut videtur, praedistinctum, etsi quoad sedem, paradoxum.

1. **Actinopelte japonica** Sacc., l. c. p. 315. — Characteres generis; pe- 5039
ritheciis in maculis minutis subcircularibus pallidis epiphyllis paucis gregariis, punctiformibus, 220-240 μ diam., nigricantibus; perithecii contextus cellulis elongatis, 4-5 μ cr.; ostiolo circulari impresso; ascis 35-42 × 28-33, episporio tenui levi 1 μ cr., pedicello crassiusculo tereti, asco breviore; sporidio ascum implente diu hyalino, demum dilute brunneolo.

Hab. in foliis nondum emortuis Castaneae vescae var. japonicae (Fagaceae), Japonia Prov. Mino, Kawauye-mure, Japoniae (K. Hara).

PHAEOSCUTELLA P. Henn. — Syll. XVII p. 872.

1. **Phaeoscutella maquilingiana** Sacc., Notae Mycol. XXIII p. 62 (Acc. 5040
Ven.-trent. 1917). — Peritheciis late remotiuscule gregariis, opace nigris, convexulis, dimidiatis, astomis, 240 μ diam.; contextu radiato, fuligineo, ambitu fimbriato; ascis ovato-ellipsoideis, minutissimis, sessilibus, apice obtusioribus, aparaphysatis, octosporis, 16-18 × 14; sporidiis subtetrastichis v. conglobatis, teretiusculis, utrinque rotundatis, leviter curvis, 12 × 3, olivaceo-fuligineis, 3-septatis, non constrictis.

Hab. in vaginis emortuis Schizostachyi acutiflori (Graminaceae), M. Maquiling, ins. Philipp. (BAKER). — A typo generis contextu distincte radiato recedit.

CHAETOPLACA Syd., Ann. Mycol. XV, 1917, p. 232 et p. 432.— Membranae superficiales, unistratosae, primitus continuae conidiiferae tandem porose ruptae, contextu indistincte radiante, irregulariter pseudo-parenchymatico, setis numerosis rigidis obsitae; hymenia copiosa in quoque thyriothecio, monasca, membrana basali tenui. Asci plus minus aequaliter dispersi, clavati, 8-spori, aparaphysati. Sporae bicellulares hyalinae in maturitate ut videtur brunneolae.

1. **Chaetoplaca Memecyli** Syd., l. c., fig. 1. — Membranae hypophyllae, 5041
dispersae, orbiculares, 1-2 mm. diam., omnino superficiales, fere atrae, sub micr. pallide fuscae, ad marginem subhyalinae, unistratosae, ex hyphis subradiantibus vel fere meandrice curvatis 3-5 μ cr. copiose septatis (articulis 4-9 μ longis), contextae, setis numerosis rigidis erectis unicellularibus obscure brunneis plerumque irregulariter dispositis subinde etiam seriatim ordinatis 30-55 μ long. inferne 3-4 μ cr. ad apicem acutis basi immersis ubique dense obsitae, primitus continuae, tandem, praecipue centro, porose ruptae; stratum hymeniale 50-80 μ cr. hyalinum fibroso-gelatinosum, hymenia plurima monasca includens, membrana basali tenui hyalina; asci plus minus aequaliter denseque dispositi, clavati, 50-65 × 16-19, ad apicem incrassati, ad basim breviter pedicellati v. subsessiles, octospori, aparaphysati; sporae distichae, obovato-ellipsoideae v. ovato-oblongae, ad apicem rotundatae, ad basim rotundatae v. leniter attenuatae, bicellulares, cellulis fere aequalibus, non v. vix constrictae, leves, 16-18 × 7-8, hyalinae, in maturitate verisimiliter brunneolae.

Hab. in foliis Memecyli sp. (Melastomataceae), Bataan, Ins. Philipp. (M. RAMOS).

HORMOPELTIS Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires XXIII p. 84 (1912). — Perithecia dimidiato-scutata, subiculo plane destituta. Asci octospori, paraphysati. Sporidia linearia in articulos plures scissilia, hyalina.— Sec. Theiss. et Syd., Ann. Myc. XV, 1917, potius *Scolecopeltopsis* paraphysata.

1. **Hormopeltis Bomplandi** Speg., loc. cit., c. ic. — Peritheciis saepis- 5042
sime hypophyllis, copiose sparsis, discoideis, 400-500 μ diam., tenui-membranaceis, centro coriacellis, astomis, ambitu hyalinis anhystisque, matrici arcte adpressis; ascis obclavatis, medium supra

attenuatis apiceque crassiuscule tunicatis, basi rotundatis, subsessilibus, 110 × 22. paraphysibus filiformibus parum longioribus cinctis; sporidiis cylindracco-clavatis, 35-65 μ longis, apice 7-8 μ cr., basi tantum 3-4 μ, in articulos 9-11, magnitudine decrescentes, supremis ovalibus vel ellipsoideis, infimis subglobosis dissilientibus, hyalinis.

Hab. ad folia viva S t r y c h n i sp. (Loganiaceae), in dumetis prope Bompland, Misiones, Argentina.

MYIOCOPRELLA Sacc., Notae Mycol. XX, in Nuovo Giorn. bot. it. 23., 1916, p. 199 (Etym. a *Myiocopro* cui affinis). — Perithecia dimidiata, convexo-applanata, atra, subastoma; contextu duriusculo e centro radiato anguste prosenchymatico, ad marginem eroso-fimbriato pallido. Asci parallele stipati, obovati, exigui ex hypothecio tenuissime celluloso flavido nascentes, polyspori. Sporidia oblonga, hyalina. — Imprimis ascis polysporis genus distinguendum videtur.

1. **Myiocoprella Bakeri** Sacc., l. c. — Peritheciis amphigenis sed saepius hypophyllis, solitariis v. aggregatis, convexo-applanatis, rugulosis, aterrimis, 0,7-1 mm., margine fimbriato-subspinulosis; ascis obovatis, crasse (praecipue apice) tunicatis, 20-22 × 11-12, basi obtuse tenuatis, sessilibus, polysporis; sporidiis polystichis tereti-oblongis, utrinque obtusulis, 4-5 × 1, hyalinis.

Hab. in foliis vivis v. languidis A s p i d i i sp. (Filices), Paete, Laguna, Ins. Philipp. — Non inficior fungillum, mihi visum singularem, esse denuo inquirendum, nam specimina observata non prorsus matura videntur [P. A. Sacc.].

SACCARDINULA Speg., — Syll. IX p. 1071, XIV, p. 692, XVI p. 645, XXII p. 532.

1. **Saccardinula xylosmicola** Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires XXIII (1912) p. 83. — Peritheciis amphigenis, saepius epiphyllis, sparsis, minutis, astomis, dimidiato-scutatis, 150-200 μ diam., margine longiuscule fimbriatis, atris, rigidulis, contextu centro indistincte parenchymatico, ambitu plus minusve manifeste prosenchymatico et pallidiore; ascis obovatis, 4-6 8-sporis, 50-60 × 30-40, cito diffluentibus ac muco densiusculo cinctis; sporidiis conglobatis, elongato-ellipsoideis, saepius leniter inaequilateris transverse 7-septatis, ad septa leniter constrictis, loculis paucis vel pluribus septo longitudinali continuo vel interrupto percursis, hyalinis, 35-45 × 12-19; loculis saepius grosse 1-guttatis.

Hab. ad folia viva Xylosmae pubescentis (Flacourtiaceae), in dumetis prope Calilegua, Jujuy, Argentina.

NIESSLELLA v. Höhn., Ber. deutsch. bot. Ges. XXXVI, 1918, p. 468.— 5045
Subiculum nullum; perithecia contextu distincte radiato donata, supra laciniato-aperta et disco ascigero erumpenti praedita; excipulum praesens v. nullum. Paraphyses filiformes simplices. Asci clavati octospori. Sporidia elongata hyalina demum 2-(usque 4-?) locularia.— Typus gen. *Niesslella scirpicola* (Fuck. in Micropeziza) v. H. Sistit autem *Niesslella aurantiaca* (Rehm in Belonidium) v. H.

ACTINOMYXA Syd., Ann. Mycol. XV, 1917, p. 146. — Thyriothecia superficialia, simplicia, contextu prosenchymatico radiante mox hystolysis ope in corpuscula irregularia dissoluta, mycelio nullo. Asci cylindraceo-clavati, paraphysati, octospori. Sporidia clavulata, hyalina, transverse pluriseptata.

1. **Actinomyxa australiensis** Syd., l. c. — Peritheciis hypophyllis, sparsis, punctiformibus, in tomento folii nidulantibus, superficialibus, atris, planiusculis, 300-350 μ diam., contextu opaco centrali mox histolysis ope in corpuscula irregularia, minuta v. majora dissoluta, peripherice dilutiora v. fere subhyalina ibique ex hyphis variae crassitudinis 3-6 μ cr. composita, articulis longiusculis; ascis copiosis, radiantibus, tereti-clavatis, ad apicem rotundatis, subsessilibus, v. brevissime pedicellatis, 56-65 × 8-10, octosporis, copiose paraphysatis; sporidiis distichis, clavulatis, hyalinis, ad apicem rotundatis, ad basim saepius leviter tenuatis, 3-septatis, non constrictis, 18-22 × 2-4. 5046

Hab. in foliis Lasiopetali ferruginei, var. cordati (Sterculiaceae), in M. Wilson, Australiae (MAIDEN).

Fam. 3. Dothideaceæ NITSCHKE *)

Dispositio systematica (p. p. emendata) sec. Theiss. et Syd. in l. c.

Subf. 1. Dothideaeae

Stroma prosenchymaticum v. plus minus parenchymaticum, nodulosum v. depressum, stratu superiori distincto destitutum, superficialiter hypostromate intramatricali praedito v. centro adnato v. immerso. Loculi rotundati stromate immersi.

*) Conferenda est Monographia cll. F. THEISSEN et H. SYDOW: *Die Dothideales, Kritsch-systematische Originaluntersuchungen* (Ann. Mycol. 13., 1915, p. 149). Opus mi-

Trib. 1. Coccoideae

Stroma superficiale, centro immersum

A. Stroma centro sterile, loculi circulariter distributi

1. Sporidia unilocularia hyalina (etiam 4-loc.?), stromata levia, paraph. praes. — Yoshinagella v. Höhn.
2. Sporidia brunnea bilocularia; stromata periphaerice hyphis tecta, paraph. praes.
   - *a*) Loculi rotundati periphaerice disjuncti — Trichodothis Th. et Syd.
   - *b*) Loculi circulariter periphaerice confluentes — Perischizon Syd.

B. Stroma aequaliter fertile

1. Sporidia unilocularia
   - *a*) filiformia, hyalina, paraph. praes. — Schweinitziella Speg.
   - *b*) ellipsoidea, hyalina, paraph. nullae — Coccostroma Th. et Syd.
   - *c*) ellipsoidea, brunnea, paraph. praes. — Auerswaldiella Th.-Syd.
2. Sporidia bilocularia
   - *a*) Sporidia inaequaliter septata; loculo inferiori papilliformi, hyalino, superiori brunneo ellipsoideo, paraph. praes. — Coccodiscus P. Henn.
   - *b*) Sporidia subaequaliter divisa
     - α Sporid. hyalina, paraph. praes. — Microcyclus Sacc.
     - β Sporid. hyalina, paraph. nullae — Coccoidella v. H.
     - γ Sporidia brunnea, paraph. praes. — Coccodothis Th. et Syd.
     - ς Sporidia brunnea, paraph. nullae — Coccodothella Th. et Syd.
3. Sporidia trilocularia, hyalina; paraph. praes. — Coccodiella Hara
4. Sporidia quadrilocularia, hyalina; paraph. nullae — Elmerococcum Th. et Syd.

Trib. 2. Leveilleae

Stroma superficiale, lata basi sessile; hypostroma intramatricale

1. Sporidia bilocularia hyalina; paraph. nullae — Microcyclella Th.
2. Sporidia bilocularia brunnea
   - *a*) Paraph. praes., mycelium distinct. praes. — Leveillella Th. et Syd.
   - *b*) Paraph. praes., mycelium distinct. nullum — Englerodothis Th. et Syd.

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crothecnicae exquisite paratum et magnae molis. Genera numerosissima (140!) in quae ab Auctoribus Familia (jam ex 16 generibus composita) haec discerpitur, plerumque fabricâ stromatis, loculorum dispositione, etc. innituntur. Et idem dici potest de generibus Microthyriacearum et Hemihysteriacearum s. lato, quarum primitus vix 30 adnumerabantur, quae vero nunc Rev. Theissen ad circ. 100 elevat! An haec nova genera sint omnia justa et valida, futura aetas pronuntiabit (P. A. Saccardo in ms. 1917).

c) Paraph. nullae; mycelium distinct. nullum — Leveilleina Th. et Syd.
d) Paraph. nullae; myc. nullum, stroma pilosulum — Discodothis v. H.
3. Sporidia filiformia — Trichochora Th. et Syd.

Trib. 3. Dothideae

Stroma innato-erumpens

1. Sporidia unilocularia
   I. Sporidia hyalina
   a) Sporidia incurvata (valsoidea) — Dothideovalsa Sp.
   b) » ellipsoidea, paraph. praes., asci 3-spori — Zimmermanniella P.H.
   c) » » , » » , asci 8-spori — Bagnisiopsis Th. et Syd.
   d) » » , paraph. nullae, stroma regulär. pulvinatum — Amerodothis Th. et Syd.
   e) Loculi distincti supra tantum confluentes — Catabotrys Th. et Syd.
   II. Sporidia brunnea, paraph. nullae — Auerswaldia Sacc.
   III. Sporidia brunnea, paraph. praes. — Dothidina Th. et Syd.
2. Sporidia bilocularia
   a) » hyalina, paraph. praes. — Uleodothis Th. et Syd.
   b) » » , paraph. nullae — Dothidella Speg.
   c) » brunnea, paraph. nullae — Systremma Th. et Syd.
   d) » » , paraph. praes. — Achorella Th. et Syd.
3. Sporidia trilocularia, hyalina — Metameris Th. et Syd.
4. Sporidia quadrilocularia hyalina, paraph. nullae — Phragmodothella Th. et Syd.
5. Sporidia quadrilocularia brunnea, paraph. nullae — Phragmodothis Th. et Syd.
6. Sporidia muralia brunnea, paraph. nullae — Dictyodothis Th. et Syd.

Subf. 2. Phyllachoreae (Theiss. et Syd.)

Stromata subcuticularia v. epidermica, semper tecta, clypeo epidermali v. cuticulari praedita, prosenchymatico-dothideacea v. plus minus irregulariter hyphenchymatica. Loculi in stromate v. in mesophyllo nidulantes, apice clypeo connexi.

Trib. 1. Trabutinae

Stroma inter cuticulam et epidermidem efformatum

1. Sporidia unilocularia
   a) Sporidia hyalina; paraph. praes. — Trabutia Sacc.-Roum.
   b) » paraph. nullae — Trabutiella Th. et Syd.
   c) » brunnea unilocularia; paraph. nullae — Phaeotrabutiella Th. et Syd.
2. Sporidia bilocularia
   a) Sporidia hyalina, loculi inaequales; paraph. praes. — Munkiodothis Th. et Syd.

b) Sporidia hyalina, loculi inaequales; paraph. nullae — Omphalospora Th. et Syd.
c) Sporidia hyalina, loculi aequales; paraph. praes. — Rehmiodothis Th. et Syd.
d) Sporidia hyalina, loculi aequales; paraph. nullae — Eurvachora Fuck.
e) Sporidia brunnea; paraph. praes. — Coccochora v. H.
f) Sporidia brunnea; paraph. nullae — Thyriopsis Th. et Syd.
3. Sporidia trilocularia, brunnea; paraph. praes. — Dermatodothis Rac.
4. Sporidia quadrilocularia, hyalina; paraph. praes. — Camarotella Th. et Syd.

Trib. 2. Scirrhinae

Stroma subepidermicum

A. Stroma rotundatum v. irregulare, nec lineare; loculi poris distinctis praediti: — Catacaumineae

1. Sporidia unilocularia

a) Sporidia hyalina exappendiculata; paraph. praes. — Catacauma Th. et Syd.
b) Sporidia hyalina exappendiculata; paraph. nullae — Catacaumella Th. et Syd.
c) Sporidia hyalina appendiculata; paraph. praes. — Schizochora Syd.
d) Sporidia brunnea; paraph. nullae — Phaeochora v. H.
e) Sporidia brunnea; paraph. praes. — Phaeochorella Th. et Syd.

2. Sporidia bilocularia

a) Sporidia hyalina, loculi inaeq.; paraph. praes. — Anisochora Th. et Syd.
b) Sporidia hyalina, loculi aequ.; paraph. praes. — Placostroma Th. et Syd.
c) Sporidia brunnea; paraph. praes. — Phaeodothiopsis Th. et Syd.

3. Sporidia 4-locul., hyal.; paraph. praes. — Phragmocauma Th. et Syd.
4. Sporidia filiformia; paraph. praes. — Scolecodothis Th. et Syd.

B. Stroma lineare, rima elongata comuni apertum: — Eu-Scirrhiineae

1. Sporidia bilocularia hyalina

a) Loculi spor. aequales; paraph. nullae — Scirrhia Nke.
b) Loculi ut supra; paraph. praes. — Scirrhodothis Th. et Syd.
c) Loculi spor. inaequales; paraph. nullae — Apiospora Sacc.

2. Sporidia 3-locularia; paraph. praes. — Scirrhophragma Th. et Syd.
3. Sporidia 4-plurilocularia

a) Sporidia hyalina; paraph. praes. — Exarmidium Kar.
b) Sporidia brunnea; paraph. praes. — Rhopographus Nke.
c) Sporidia brunnea; paraph. nullae — Rhopographina Th. et Syd.

Trib. 3. Phyllachorinae

Stroma in mesophyllo immersum

1. Sporidia 1-locularia

a) Sporidia hyalina; paraph. praes. — Phyllachora Nke.

b) Sporidia hyalina; paraph. nullae — Phyllachorella Syd.
c) Sporidia brunnea; paraph. praes. — Sphaerodothis Shc.

2. Sporidia 2-locularia

a) Loculi sporid. inaequales, loculo sup. hyalino; paraph. praes. — Stigmochora Th. et Syd.
b) Loculi ut supra; loc. sup. brunneo, infer. papilliformi; paraph. praes. — Coccochorella v. H.
c) Loculi sporid. aequales; sporid. hyal.; paraph. praes. — Endodothella Th. et Syd.
d) Loculi et sporidia ut supra; paraph. nullae — Oligostroma Syd.
e) Sporidia brunnea; paraph. praes. — Phaeodothis Syd.

3. Sporidia 4-locularia

a) Sporidia hyalina; paraph. praes. — Telimena Rac.
b) Sporidia hyalina; paraph. nullae — Phragmocarpella Th.-Syd.
c) Sporidia brunnea; paraph. praes. — Homostegia Fuck.
d) Sporidia brunnea; paraph. nullae — Clypeostroma Th. et Syd.

4. Sporidia muralia brunnea

a) Paraphys. nullae — Dictyochora Th. et Syd.
b) Paraphys. praesentes — Dictyochorella Th. et Syd.

5. Sporidia filiformia — Ophiodothella v. H.

Subfam. 3. Montagnellaeae Th. et Syd.

Loculi distincti in mesophyllo immersi perithecioidei, stromate distincto destituti v. subhyphenchymatico tantum praediti, apice epidermide emergentes; v. in stromate basali insidentes, v. in stromato distincto solitarii.

Trib. 1. Eu-Montagnellae

Loculi in mesophyllo immersi v. in stromate subcorticali distincte adnati, diu immersi v. prominuli:

1. Sporidia 1-locularia hyalina

a) Loculi singuli in mesophyllo; stroma distinctum nullum; paraph. praes. — Haplothecium Th. et Syd.
b) Loculi stromatici; paraph. nullae — Montagnellina v. H.

2. Sporidia bilocularia

a) Sporidia hyalina; paraph. nullae; stroma distinct. nullum

α) Loculi singuli disjuncti diu immersi apice nodulosi — Haplodothis v. H.
β) Loculi conferti, emergentes, apice non incrassati — Pseudosphaerella v. H.

b) Sporidia hyalina; paraph. nullae; stromatica

α) Loculi irregulariter distributi — Diplochorella Syd.

β) Loculi circulariter dispositi — Cyclodothis Syd.
γ) Loculi lineariter dispositi — Scirrhiachora Th. et Syd.

c) Sporidia brunnea; stroma dist. nullum; paraph. praes. — Pyrenobotrys Th. et Syd.
d) Sporidia brunnea; stroma praesens; loculi irregular. distributi; paraph. nullae — Crotone Th. et Syd.
e) Sporidia, stroma et paraph. ut supra; loculi ramoso-radiantes — Teratosphaeria Syd.

3. Sporidia 4-locul. brunnea; paraph. praes.; stromatica — Syncarpella Th. et Syd.
4. Ut supra; paraph. nullae — Montagnella Speg.
5. Sporidia muralia; stromatica
   a) Sporidia hyalina; paraph. nullae — Hyalocurreya Th. et Syd.
   b) Sporidia brunnea; paraph. praes. — Curreya Sacc.
   c) Sporidia brunnea; paraph. nullae — Epibothrys Th. et Syd.
6. Sporidia filiformia; paraph. nullae — Ophiocarpella Th. et Syd.

Trib. 2. Rosenscheldiæ

Loculi superficiales, stromate basali adnati v. stromate proprio praediti.

1. Loculi stromate basali cuticula innato-insidentes
   a) Loculi conferti; sporidia hyalodidyma; paraph. nullae — Rosenscheldiella Th. et Syd.
   b) Sporidia phaeodidyma; caeterum ut supra — Licopolia Sacc. et Syd.
   c) Stromata unilocularia perithecioidea pede brevi innata; sporidia hyalodidyma; paraph. nullae — Monopus Th. et Syd.
2. Loculi distincti stromate erumpenti elongato exserti; sporid. 4-loc., brunnea; paraph. praes. — Rosenscheldia Sp.
3. Stroma cylindraceo-erumpens, supra loculis ramoso-congregatis praeditum; sporidia phaeodidyma; paraph. nullae — Stalagmites Th. et Syd.

Genera excludenda v. dubia:

Hyalodothis P. et Har. (cnfr. Ann. Myc. 1914, p. 186)
Scirrhiella Speg. = Sphaeriaceae, *Botryosphaeriae* proximum
Curreyella Sacc. = Sphaeriales (Syn. Discostroma Clem.)
Darwiniella Speg. = Sphaeriales (Curreyellae proximum)
Diplotheca Starb. = Myriangium sec. v. Höhn.
Oxydothis Pen. et Sacc. = Sphaeriales (Syn. Merrilliopeltis P. Henn.)
Kullhemia Karst. = Discomycetae
Plowrightiella Sacc. = ? (Syn. Pleodothis Clem.)
Hypoxylonopsis P. Henn. = Valsaria
Eurytheca de Seyn. = Myriangiaceae

Gibellia Sacc. = Sphaeriales
Roussoella Sacc. = Didymosphaeria
Montagnina v. Höhn. = ? Cucurbitariaceae
Ophiodothis Sacc. = Hypocreac. p. p., typ. gen. = Balansia
Loranthomyces v. Höhn. = Trichothyriaceae
Myxodiscus v. Höhn.
Roumegueria Sacc.
Dichosporium Pat.
Alboffia Speg. = ? Corynelia
Pilgeriella P. Henn. = ? Perisporiaceae
Monographos Fuck. = Sphaeriales
Heterodothis Syd. = Lichen (Phylloporina)
Mazzantia Mont. = Hyponectrieae (? Apiosphaeria)
Augatia Syd. = Myriangiaceae

Subf. 1. Dothideaeae

Sect. 1. Hyalosporae

AMERODOTHIS Theiss. et Syd., Ann. Mycol. 13., 1915, p. 295. — Stroma erumpens dothideoideum, loculis immersis; ascis aparaphysatis, octosporis hyalinis. — Typ. gen.:

1. **Amerodothis Ilicis** (Cke.) Th. et Syd., l. c., *Bagnisiella Ilicis* (Cke.) Sacc., Syll. II p. 590. 5047
2. **Amerodothis Uncariae** Rac. in Th. et Syd., l. c., *Bagnisiella Uncariae* (Rac.) Sacc. et Tr., Syll. XXII p. 408. 5048
3. **Amerodothis Juglandis** (Mont.) Th. et Syd., l. c., *Botryosphaeria Juglandis* (Mont.) Sacc., Syll. I p. 457. 5049
4. **Amerodothis Molluginis** (v. Höhn.) Th. et Syd., l. c., *Bagnisiella Molluginis* (v. H.) Sacc. et Tr., Syll. XXII p. 408. 5050

CATABOTRYS Th. et Syd., Ann. Mycol. 13., 1915, p. 297. — Stromata erumpentia, parenchymatica, inter singulos oculos subtus profunde incisa; loculis immersis. Asci aparaphysati octospori. Sporidia hyalina continua. — Typus generis:

1. **Catabotrys Palmarum** (Pat.) Th. et Syd., l. c., cum icon., *Bagnisiella Palmarum* Pat., Syll. IX p. 1005. 5051

COCCOSTROMA Theiss. et Syd., Ann. Mycol. 12., 1914, p. 269; 13., 1915, p. 271. — Stroma pulvinatum, superficiale, dothideoideum, centro affixum. Loculi immersi, rotundati, aequaliter distributi. Asci octospori, aparaphysati. Sporidia continua hyalina. Typ. gen.:

1. **Coccostroma Machaerii** (P. Henn.) Th. et Syd., l. c. = *Phyllachora Machaerii* P. Henn., Syll. XI p. 369. 5052
2. **Coccostroma Puttemansii** (P. Henn.) Th. et Syd., l. c. = *Auerswaldia Puttemansii* P. Henn., Syll., XVII p. 842. 5053
3. **Coccostroma palmigenum** (Berk. et Curt.) Th. et Syd., l. c. = *Botryosphaeria palmigena*, Syll. XIV p. 525. 5054

Sect. 2. Phaeosporae

AUERSWALDIA Sacc. – Syll. II p. 626 et cfr. p. 461, IX p. 1031, XI p. 374, XIV p. 675, XVI p. 625, XVII p. 841, XXII p. 427.

1. **Auerswaldia Gigantochloae** Rehm, Ascomyc. Philipp V, Leaflets of Philipp. Botany, VI (1914) p. 2222. — Stromatibus innatis, orbicularibus dein striiformibus loculos 1-3, globosos, arcte adproximatos, 150 μ latos, papillulis minutis demum prominentes includentibus, per corticem stellatim vel rimose disrumptum conspicuis; hypostromate nigritulo sub cortice effuso; ascis clavatis, apice rotundatis, crasse tunicatis, 90-100 × 20-30, paraphysibus filiformibus intermixtis; sporidiis distichis, oblongis, utrinque rotundatis, rectis, obscure fuscis, 25-30 × 12-14. 5055

   Hab. in culmo Gigantochloae (Graminaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (C. F. Baker). — Hoc gen. spectant etiam *Dothidea examinans* (M. et B.) Sacc., Syll. II p. 626, et *Bagnisiella oceanica* (Ces.) Sacc., Syll. II p. 590.

2. **Auerswaldia decipiens** Rehm, Ascomyc. Philipp. III, in Philipp. Journ. of Sci. VIII (1913) p. 395. — Stromatibus peridermio innatis, intus carbonaceis, primitus dispersis dein plus minusve confluentibus, hemiglobose prominentibus, atris, nitentibus, 1-2,5 mm. diam.; loculis 2-4 innatis, globulosis, 0,5 mm. diam., papillulis minimis conoideis prominentibus; ascis cylindraceis, octosporis, 80-100 × 12, paraphysibus septatis 3-4 μ cr. obvallatis; sporidiis oblique monostichis, ellipsoideis, continuis, rectis, fuscis, 12-14 × 7-8. 5056

   Hab. in petiolis emortuis Arengae (Palmae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (C. F. Baker). — Ad *Phaeochora* von Höhn. pertinens; ab *A. Arengae* (Rac.) Sacc. et Syd. facile dignoscenda.

3. **Auerswaldia Pandani** Rehm, Ascomyc. Philipp. VI, Leaflets of Philip. Bot. VI (1914) p. 2273. — Stromatibus in epiphyllo haud decolorato gregariis, sessilibus, e basi discoidea hemisphaerico-conoideis, atris, nitidis, carbonaceis, loculos 2-4 includentibus, 0,5-2 mm. la- 5057

tis, ostiolis papillulatis minimis superficiem stromatis subverrucosa reddentibus praeditis, demum circa loculos collabentibus, annulum latum nigrum formantibus; ascis evanidis; sporidiis ellipsoideis, rectis vel curvatulis, continuis, fuscis, 15 × 7-8.

Hab. ad basim foliorum emortuorum P a n d a n i (Pandanaceae). Mt. Banahao, ins. Philipp. (C. F. Baker).

DOTHIDINA Theiss. et Syd., Ann. Mycol, 13., 1915, p. 302. — Stromata foliicola, erumpenti subsuperficialia, dothideoidea, loculis immersis. Asci paraphysati octospori. Sporidia brunnea simplicia.

1. **Dothidina felipponeana** Sacc., *Auerswaldia felipponeana* Sacc., Ann. Mycol. XIII (1915), p. 130. — Stromatibus laxe gregariis v. sparsis, epiphyllis, superficialibus globoso-pulvinatis, nigricantibus, e carnoso subcarbonaceis, 800-1000 μ latis, supra convexo-applanatis, rimulosis, interdum 2-4 confluentibus; loculis pulpa stromatica, atra immersis, subglobosis, 160-170 μ diam., ostiolis parum emergentibus, nitidulis, ascis tereti-clavatis, deorsum sensim tenuatis, apice rotundatis, 190-200 × 18-20, octosporis, paraphysibus filiformibus, guttulatis 3-4 μ cr. hyalinis obvallatis; sporidiis distichis oblongo-ellipsoideis, utrinque rotundatis, 19-24 × 8-11, e latere leniter depressis, farctis, subinde 2-guttatis, fuligineis. 5058

Hab. ad folia languida v. emortua P a l m a r u m, Montevideo, Paseo del Prado. — Verisimiliter affinis v. etiam synon. *Dothidinae palmicolae* (Speg.) (Doct. F. Felippone).

Hoc gen. spectant etiam sec. Th. et Syd.: *Auerswaldia Leandrae* Syd., Syll. XVII p. 842, *A. Fiebrigii* P. Henn., Syll. XVII p. 842, *A. Hirtellae* P. Hen., Syll. XXII p. 428, *A. Miconiae* P. Henn., Syll. XVII p. 841, *A. disciformis* Wint., Syll. IX p. 1033, *A. palmicola* Speg., Syll. IX p. 1031.

AUERSWALDIELLA Theiss. et Syd., Ann. Mycol. 12., 1914, p. 278; 13., 1915, p. 272. — Stromata superficialia, dothideoidea, pede centrali innata, hypostromate subcuticulari. Loculis rotundis immersis. Ascis paraphysatis octosporis. Sporidiis continuis coloratis. Typ. gen.:

1. **Auerswaldiella puccinioides** (Speg.) Th. et Syd., l. c. = *Auerswaldia puccinioides* Speg., Syll. IX p. 1033 (Syn. *Dothidea viridispora* (Cke.) Berl. et Vogl., Syll. IX p. 1044, *Bagnisiella Pruni* P. Henn., Hedw. v. 48 (1908) p. 6: « Stromatibus amphigenis, innato-superficialibus, pulvinato-subglobosis, atris, granulato-rugulosis, 1-2 mm. diam.; loculis subglobosis, immersis, ostiolatis; ascis clavatis, vertice rotun- 5059

datis, attenuato-stipitatis, octosporis, paraphysatis, 100-140 μ longis, p. sp. 60-70 × 15-25; sporidiis subdistichis, oblongo-ellipsoideis, hyalinis, continuis, 16-18 × 6-7.

Hab. in foliis Pruni sphaerocarpae (Rosaceae). Serra da Cantareira, S. Paulo, Brasilia.

BOTRYOCHORA Torrend, Broteria, Bot. v. XII, 1914, fasc. I p. 65.— Stromata erumpentia, superficialia, turbinato-placentiformia, singula v. botryose aggregata, basi angustiore innata, atra; textura molliuscula, coriaceo-ceracea, crusta exteriori tenui atra, intus fumoso-brunneola hyalinescente, cellulis polygonis seriatim dispositis seriebus parallelis e basi ascendenti divergentibus. Loculis immersis dothideaceis strato simplici. Conidia continua brunnea. Asci paraphysati, octospori; sporidia continua brunnea.

1. **Botryochora nigra** (Torrend) Torr., l. c. p. 65 (Fungi sec. exs. 269), 5060
Megalonectria nigra, Bull. Jard. Bot. Bruxelles IV. 1., 1913, p. 8.— Stromata saepius ad basim stilboidea 1-1.5 mm. lata, applanato-turbinata, in sicco saepe umbilicato-collabescentia, superficie submammillosa v. girose plicata, atra. Loculis periphericis unistratosis, immersis, ellipticis, conidiferis majoribus, 350 × 280, asciferis minoribus 160-200 × 100-130: conidiis in sterigmatibus brevibus simplicibus hyalinis oriundis, parietalibus, in toto loculo, continuis, ellipticis, primum hyalinis, dein fuligineis, 20-24 × 10-12, utrinque rotundatis; ascis clavatis, breviter pedicellatis parce paraphysatis octosporis, p. sp. 65-75 × 16-18; sporidiis fusco-brunneis, continuis, ellipsoideis utrinque subacutatis rima longitudinali 18-22 × 8-10 monostichis v. subdistichis.

Hab. ad cortices arborum, Kisantu, Congo (Vanderyst), Zumbo Mozambique (A. Cruz). — Status conidicus verisimiliter sistit *Stilbella cinerea* Torr.

Sect. 3. Hyalodidymae

PLOWRIGHTIA Sacc. — Syll. II p. 635, IX p. 1041, XI p. 376, XIV p. 680, XVI p. 628, XVII p. 845, XXII p. 429.

1. **Plowrightia Pelvetiae** Gonz. Fragoso, Mem. R. Soc. Españ. Hist. Nat. 5061
t. 11., 1919, 3., p. 110, fig. 2. — Stromatibus innatis, immersis, demum erumpentibus, atris, rugulosis, oblongis vel oblongo-elongatis vel irregularibus, 60-700 μ long., coriaceo-carbonaceis 1-3 plerumque 1-locularibus, loculis immersis, oblongo-conoideis (gen. *Zi-*

gnoellae in mentem revocantibus), loculis 70-140 μ in diam., ostiolo pertusis, proeminentibus; ascis clavatis, 36-52 × 12-18, parietibus crassiusculis praeditis; apice rotundatis, breviter pedicellatis, paraphysibus numerosissimis, hyalinis, articulatis, filiformibus, flexuosis, simplicibus vel rarius ramosis, articulatis; sporidiis irregulariter distichis, subhyalinis, ovoideo-oblongis, 11-14 × 5-7, 1-septatis, loculis inaequalibus, saepe 1-guttulatis vel granulosis sporidiis junioribus in muco evolutis.

Hab. in frondibus Pelvetiae canaliculatae Dec. et Thur. (Algae), prope Ramallosa Lourido, Pontevedra, Hispania (Prof. Bescansa). — Verisimiliter eadem est ac *Dothidella Pelvetiae* Suth. quae anterior (de qua cnfr. s. l.)

2. **Plowrightia Mereschkowskyi** Vouaux, Bull. Soc. Myc. Fr. 1912, p. 194. — 5062
Stromatibus pulviniformibus immersis 2-3 mm. latis, e cellulis polygoniis 5-8 μ diam. efformatis; loculis irregulariter distributis 60-150 μ latis, primum clausis demum ostiolatis; ascis clavatis, breviter crasseque pedicellatis, apice rotundatis ibique tunica crassiori praeditis, 46-68 × 14-15, octosporis; paraphysibus agglutinatis, indistinctis; sporidiis distichis, plus minus ellipsoideo-elongatis v. ovoideis, hyalinis, uniseptatis, non constrictis, saepe biguttulatis, loculo inferiori angustiori et breviori, 12-18 × 5-6.

Hab. in thallo Aspiciliae hispidae Meresch. (Lichenes), Bogdo Astrakhan, Rossia (Mereschkowsky).

3. **Plowrightia Puiggarii** Spegaz., Rel. Mycol. trop. etc., in Bol. Ac. Nac. 5063
Cienc. Cordoba, t. 23., 1919, Extr. p. 131. - Maculae nullae: stromata hypophylla depresso-subglobosa parva 0,5-1 mm. diam. sparsa v. laxe gregaria, atra glabra laevia; loculi periphaerici numerosi obovati 100 × 60; asci subobclavati breviter pedicellati, paraphysati, 70 × 12; sporae octonae hyalinae oblique distichae, subfusoideae v. fusoideo-subclavulatae, ad septum medium leniter constrictae, loculis subaequilongis, supero obtusiusculo infero acutiusculo, 16-18 × 4-5.

Hab. ad folia viva Rubiaceae frutescentis cujusdam, prope Apiahy, Brasilia (J. Puiggari).

PLEODOTHIS F. E. Clements, Genera of Fungi 1909, p. 49, 173. — 5064
Est *Plowrightia* polyspora. — Typus *P. polyspora* Bref., Syll. XI, p. 376. — Si hoc gen. validum, **Plowrightiella** (Sacc.) vocandum quia anterius (Syll. l. c., ut Sectio).

MICROCYCLUS Sacc., Syll. XVII p. 844. — Theiss. et Syd., Ann. Mycol. 13., 1915, p. 276.

1. **Microcyclus Walsurae** Sydow, Ann. Mycol. XIII, 1915, p. 39. — Maculis nullis; stromatibus hypophyllis, singulis etiam epiphyllis, sparsis, solitariis vel binis trinis aggregatis, superficialibus, atris, 500-700 μ latis, 180-210 μ altis, opacis, rugulosis, pede brevi, centrali 90-150 μ crasso innato suffultis, e cellulis 8-10 μ longis prosenchymatice contextis; loculis immersis, ca. 10-20 μ quoque stromate, aequaliter dispositis, 80-110 μ diam., lenissime tantum prominulis; ascis brevissime stipitatis, 50-65 × 13-17, octosporis, paraphysatis; sporidiis plerumque distichis, oblongis, hyalinis, utrinque rotundatis, medio 1-septatis, non constrictis, 18-22 × 5-6, loculo supero plerumque parum latiore. 5065

   Hab. in foliis Walsurae piscidiae (Meliaceae), Peradenyia, Ceylon (T. Petch).

MICROCYCLELLA Theiss., Ann. Mycol. 12., 1914, p. 68; Theiss et Sydow, l. c. 13., 1915, p. 283. — Stromata superficialia, dothideoidea, lata basi sessilia, ex hypostromate intramatricali oriunda, coriaceo-carbonacea; loculis immersis rotundatis. Asci aparaphysati octospori. Sporidia hyalodidyma. — Typ. gen.:

1. **Mycrocyclella nervisequia** (v. Höhn.) Theiss., l. c. = *Polystomella nervisequia* v. Höhn., Syll. XXII p. 522. 5066

ULEODOTHIS Theiss. et Syd., Ann. Mycol. 13., 1915, p. 305. — Stromata erumpentia, dothideoidea, loculis immersis. Asci paraphysati octospori; sporidia hyalodidyma. — Typ. gen.:

1. **Uleodothis Balanseana** (S., R. et B.) Th. et Syd. l. c., *Plowrightia balanseana* Sacc., Roum. et Berl., Syll. IX p. 1041 (Syn. *Phyllachora Nyctaginearum* Speg., Syll. IX p. 1020, *Dothidella Adenocalymmatis* P. Henn., Syll. XIV p. 677). 5067
2. **Uleodothis Rhynchosporae** (Rehm) Th. et Syd. l. c., p. 306 *Lizonia Rhynchosporae* Rehm, Syll. XVI p. 486 (*Plowrightia Rh.* v. Höhn.). 5068
3. **Uleodothis Pteridis** F. L. Stevens, Bot. Gazette 69., 1920, p. 248, tab. XIII fig. 6-7. — Maculis brunneis, aridis, 3-5 mm. diam.; stromatibus nigris ob perithecia rugosis, 1-2 mm. diam. in epiphyllo majoribus, subepidermicis sed plus minus profunde innatis, superficie rugosis, non clypeatis epidermide lacerata tectis; hyphis stromaticis parallele distributis; loculis numerosis 100 μ circ. diam., globulosis; ascis numerosis cylindraceis tetrasporis, 65 × 14; para- 5069

physibus paucis inconspicuis, exilibus filamentosis; sporidiis hyalinis bilocularibus, oblongis, 17-20 × 4-5.

Hab. in frondibus Pteridii caudati (Filices), Maricao, Porto Rico. — Ob asces tetrasporos praedistincta species?

ULEODOTHELLA Sydow, Ann. Mycol. 18., 1920, p. 184. — Ab *Uleodothide* differt sporidiis aequaliter septatis. — Typus gen.: *U. Aphanes* (Rehm sub *Polystomella*) Syd.

1. **Uleodothella Aphanes** (Rehm) Syd., l. c., *Polystomella Aphanes* Rehm, Syll. XVII p. 865. (*Uleodothis Aph.*, Th. et Syd. Ann. Mycol. 13., 1915, p. 306). 5070

DOTHIDELLA Speg. — Syll. II p. 627, IX p. 1036, XI p. 375, XIV p. 676, XVI p. 626, XVII p. 846, XXII p. 432. — Syn. (sec. Th. et Syd., Ann. Mycol. 13., 1915, p. 307) *Plowrightia* Sacc.

1. **Dothidella Pelvetiae** Sutherland in Trans. Brit. Myc. Soc. V, pt. I, 1914, p. 154 (1915). — Stromatibus sparsis, parvis, 210-650 μ diam., convexis, initio immersis, tandem in summa parte, atris; loculis immersis, subglobosis vel complanatis, 100-120 μ latis, 80-90 μ altis; ascis cylindraceis vel clavatis, octosporis, paraphysatis, 40-45 × 12-15; sporidiis distichis, ovoideis vel oblongis, hyalinis, 1-septatis, vix constrictis, episporio crasso, 12,5-15 × 5-6. 5071

Hab. in thallo Pelvetiae canaliculatae (Algae), Orkney, Scotia. — Cnfr. *Plowrightia Pelvetiae* p. 544.

2. **Dothidella Canarii** Rehm, Ascomyc. Philipp. III, in Philipp. Journ. of Sci. VIII (1913) p. 398. — Stromatibus in maculis flavidulis folio innatis, in utraque pagina conspicuis, sparsis, orbicularibus, planis, atris, ca. 3 cm. latis, verruculosis, loculis plurimis globulosis; ascis clavatis, octosporis, 80 × 10; sporidiis distichis, fusiformibus, utrinque acutatis, medio septatis, non constrictis, hyalinis, 12-15 × 3-4. 5072

Hab. in foliis Canarii villosi (Burseraceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (Baker). — Verisimiliter eadem est ac *Phyllachora Canarii* P. Henn. (cnfr. Theiss. et Syd., Ann. Mycol. 13., 1915, p. 517).

3. **Dothidella vacciniicola** Dearness et House, N. Y. St. Mus. Bull. n. 188, p. 43 (1916). — Stromatibus nodulosis, subglobosis, basi 1-2 mm. diam., 1-2 mm. altis, obscure brunneis, corticem penetrantibus, demum cavis, subcarbonaceis; loculis periphaericis, plerumque stratum simplicem efformantibus, in quoque mm. 6 v. 7, ostiolis puncti- 5073

formibus 120-150 μ latis 150 μ altis; ascis e linearibus subclavatis, apicibus subconiventibus, 75-90 × 6-7, paraphysibus linearibus 90-100 μ; sporidiis hyalinis, submonostichis, parum conglobatis, uniseptatis, 10-12 × 5-6.

Hab. parasitice in ramis vivis Vaccinii atrococci (Ericaceae), Biltmore, N. C., Amer. bor. (H. D. House).

4. **Dothidella portoricensis** F. L. Stevens, Bot. Gazette 69., 1920, p. 249, fig. 1, tab. XIII fig. 8-9. — Maculis linearibus amphigenis definitis 0,5-1 × 3-4 mm.; stromatibus linearibus ex epidermide parum elevatis (circ. 70 μ); loculis plerumque 5-seriatis, subglobosis 70 μ circ. diam.; paraphysibus nullis; ascis numerosis cylindricis, octosporis, 54 × 10; sporidiis e hyalinis dilute fumosis, uniseptatis, 17 × 3,5. 5074

Hab. in foliis Gleicheniae sp. (Filices), Las Marias, Porto Rico. — A *D. pteridophila* Speg. caracteribus stromaticis diversa.

5. **Dothidella Gigantochloae** (Rehm) Theiss. et Sydow, Ann. Mycol. 13., 1915, p. 320, *Scirrhia Gigantochloae* Rehm, Ascomyc. Philipp. V, Leaflets of Philipp. Bot. VI (1914) p. 2223. — Stromatibus in epiphyllo late subcinereo gregarie innatis, parallele striiformibus, oblongis, utrinque obtusis, rectis, 0,3-1 mm. long. 0,3-0,5 mm. latis, erumpentibus, nigris; loculis 100 μ latis, seriatis, minutissime ostiolatis; ascis clavatis, filiformi-paraphysatis, 60-65 × 14, in stipitem elongatis; sporidiis distichis, ellipsoideis, utrinque subacutatis, medio septatis, non constrictis, hyalinis, 12-15 × 6. 5075

Hab. in foliis Gigantochloae Scribnerianae (Graminaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (S. A. Reyes).

6. **Dothidella flava** F. L. Stevens, Bot. Gazette, 69., 1920, p. 250 fig. 2-3. — Stromate e pallido flavo juventute rotundato senio lineari, 1,6 mm. longo 0,27 mm. lato, subepidermico, late erumpenti et elevato; loculis globulosis 60-70 μ diam. 1-v. 2 seriatis; ascis linearibus octosporis, 34-51 × 6; sporidiis hyalinis, bilocularibus, oblongis, 14 × 3,5. — Conidiis filiformibus 40 × 1,5 hyalinis uno cum stromate in acervulos v. in pycnidios efformatis. 5076

Hab. in foliis Lithachnes pauciflorae (Graminaceae), Prujillo Alto, Mayaguez, Florida Adentro, in Porto Rico. — Color stromatum peculiaris et tunc fungus fere hypocreaceus, ceterum dothideaceus.

7. **Dothidella? pakuri** Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires, XXIII (1912) p. 94. — Maculis epiphyllis, minutis, de- 5077

terminatis, 1-3 mm. diam., centro pallescentibus, ambitu fuscidulis; stromatibus hypophyllis, sparsis, epidermide laciniatim disrupta cinctis, suborbicularibus, parvis, 1-3 mm. diam., superne planis, non vel vix colliculosis, extus fuscis intus atris; contextu grosse parenchymatico, olivaceo, aegre perspicuo; loculis monostichis, subglobosis, minusculis, 50-60 μ diam., ostiolis latissimis, 25-30 μ diam., apertis, vix prominulis; ascis fusoideis, apice crassissime tunicatis, breviter crasseque pedicellatis, 50 × 10, aparaphysatis, per aetatem subdiffluentibus; sporidiis saepius distichis, elliptico-subclavulatis, utrinque obtusiusculis, medio 1-septatis, non vel lenissime constrictulis, loculo supero saepe nonnihil crassiore, 4-guttulatis vel non, rarius 4-blastis, hyalinis, 14-18 × 4-6, primo muco obvolutis.

Hab. in foliis vivis Rheediae brasiliensis (Guttiferae), prope Puerto Leon, Misiones, Argentina.

Sect. 4. Phaeodidymae

DOTHIDEA Fr. — Syll. II p. 639, IX p. 1043, XI p. 377, XIV p. 680, XVI p. 628, XVII p. 852, XXII p. 435. — Cnfr. Theissen et Sydow, Ann. Mycol. 13., 1915, p. 328.

1. **Dothidea tetraspora** B. et Br. — Syll. II p. 640 — var. **citricola** Sacc., Philipp. Journ. of Sc. Manila, P. I, v. 18., 1921, p. 600. — Sporidiis quam typo paullo brevioribus, 16 × 7, rufo-fuligineis, articulis subaequalibus; ascis 70 × 11-12. 5078

   Hab. in trunco emortuo Citri trifoliatae Fukien, Foochow, Cina (Skvortzow). — Species verisimiliter collecticia de qua cnfr. Theiss. et Sydow, Ann. Myc. 13., 1915, p. 336.

2. **Dothidea Edgeworthiae** H. et P. Sydow et Hara, in Sydow Ann. Mycol. XI, 1913, p. 267. — Stromatibus erumpentibus, sparsis v. aggregatis, minutissimis, 200-350 μ diam., atris, superficie leniter rugulosis; loculis paucis, 1-5 in quoque stromate; ascis cylindraceis, apice obtusis, deorsum in stipitem longum attenuatis, p. sp. 45-60 × 12-16, octosporis; paraphysibus numerosissimis ascos superantibus; sporidiis distichis, ellipsoideo-oblongis, utrinque rotundatis, medio 1-septatis et constrictis, fusco-brunneis, 13-16 × 6,5-7,5. 5079

   Hab. in ramis siccis Edgeworthiae Gardneri, Kawanye-mura prov. Mino, Japoniae (K. Hara). — Species ulterius inquirenda habitus *Erikssoniae* sed fabrica peritheciorum a Dothideaceis potius excludenda. Cnfr. Theiss. et Syd., Ann. Mycol. 13., 1915, p. 340, cum icon.

SYSTREMMA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 330.— Stroma erumpens, dothideoideum, loculis immersis, ascis aparaphysatis octosporis. Sporidia phaeodidyma. — Typ. gen. :

1. **Systremma natans** (Tode) Theiss. et Syd., l. c., *Sphaeria natans* Tode 1791 (Syn. *Dothidea Sambuci* Fr., Syll. II p. 639). — var. **Viburni** Jaap, Verh. Bot. Ver. Prov. Brandenb. 57. (1915) p. 12.— A typo differt sporidiis magis scabris et matrice aliena. 5080

   Hab. in ramis exsiccatis Viburni Lantanae (Caprifoliaceae), in monte S. Salvatore pr. Lugano, Helvetia.

2. **Systremma placenta** Theiss. et Syd. nom. nov., l. c. p. 334 = *Dothidea bullata* Berk. nec Fries (Plowrightia bullata, Syll. II p. 637). Ad gen. *Systremma*, species complures adscriptae sunt quae in Theiss. et Sydow citantur. 5081

ACHORELLA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 340. — Stromata erumpentia, dothideoidea loculis immersis. Asci paraphysati octospori. Sporidia phaeodidyma. — Typ. gen. :

1. **Achorella ametableta** (Rehm) Th. et Syd., l. c., *Dothidella ametableta* Rehm, Syll. XIV p. 677. 5082
2. **Achorella Gastrolobii** (P. Henn.) Th. et Syd. l. c., *Lizoniella Gastrolobii* Sacc., Syll. XVII p. 661. 5083
3. **Achorella Centrolobii** (P. Henn.) Th. et Syd., l. c., *Dothidea Centrolobii* P. Henn., Syll. XVII p. 853. 5084
4. **Achorella juruana** (P. Henn.) Th. et Syd., l. c., *Dothidea juruana* P. Henn., Syll. XVII p. 854. 5085

TRICHODOTHIS Theiss. et Syd., Ann. Mycol. 12., 1914, p. 177 ; 13., 1915, p. 268. — Stromata superficialia, centro innata, contextu dothideaceo brunneo, loculis immersis periphaericis, media sterilia, ad marginem superiorem hyphis radiantibus liberis coronata. Asci cylindraceo-ventricosi, paraphysati. Sporidia octona, didyma, fusca. Typ. gen. :

1. **Trichodothis comata** (Berk. et Rav.) Th. et Syd., l. c. = *Asterina comata* Berk. et Rav., Syll. I p. 49. 5086

PERISCHIZON Syd., Ann. Mycol. 12., 1914, p. 265; 13., 1915, p. 269.— Stromata superficialia, dothideoidea, pede centrali innata, glabra, medio sterilia, loculis periphaerice in annulum confluentibus; ascis paraphysatis octosporis ; sporidiis phaeodidymis. — Differt a *Trichodothide* loculis in annulum confluentibus. — Typ. gen. :

1. **Perischizon oleifolium** (Kalch. et Cke.) Syd., l. c. = *Dothidea oleifolia* Kalch. et Cooke, Syll. II p. 642. 5087

COCCODOTHIS Theiss. et Syd., Ann. Mycol. 12., 1914, p. 271; 13., 1915, p. 279. — Stromata pulvinata, centro affixa, contextu celluloso brunneo. Loculi immersi stipati. Asci paraphysati octospori. Sporidia phaeodidyma. — Typ. gen.:

1. **Coccodothis sphaeroidea** (Cooke) Theiss. et Syd., l. c. = *Dothidea sphaeroidea* Cke., Syll. II p. 642. 5088
2. **Coccodothis euglypta** (Mont.) Th. et Syd, l. c. = *Phyllachora euglypta* (Mont.) Sacc., Syll. II p. 600. 5089

COCCODOTHELLA Theiss. et Sydow, Ann. Mycol. 13., 1915, p. 280.— Est *Coccodothis* paraphysibus destitutum. — Typ. gen.:

1. **Coccodothella placida** (Syd.) Syd., l. c. = *Plowrightia placida* Syd., Syll. XXII p. 430. 5090

LEVEILLELLA Theiss. et Sydow, Ann. Mycol. 13., 1915, p. 284. — Stromata superficialia, dothideoidea, carbonacea, lata basi sessilia, ex hypostromate intramatricali per stomata erumpente oriunda, mycelio superficiali ramoso septato absque hyphopodiis. Loculis immersis lenticularibus. Ascis paraphysatis octosporis. Sporidia phaeodidyma. Typ. gen.:

1. **Leveillella Drimydis** (Lév.) Theiss. et Syd., l. c. = *Lembosia Drimydis* Lév., Syll. II p. 743 (Syn. *Asterina compacta* Lév., Syll. I p. 51). 5091

ENGLERODOTHIS Theiss. et Syd., Ann. Mycol. 13., 1915, p. 285.— Stromata superficialia, dothideoidea, lata basi sessilia, mycelio superficiali libero nullo. Loculis immersis globulosis. Ascis paraphysatis octosporis. Sporidiis phaeodidymis. — Typ. gen.:

1. **Englerodothis kilimandscharica** (P. Henn.) Theiss. et Syd., l. c.= *Coccoconia kilimandscharica* P. Henn., Syll. XIV p. 815. 5092

LEVEILLINA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 286. — Stromata superficialia, dothideoidea, lata basi sessilia, ex hypostromate epidermali et subepidermali per stomata erumpenti oriunda, absque mycelio superficiali libero. Loculis immersis globulosis. Ascis aparaphysatis octosporis. Sporidiis phaeodidymis. — Typ. gen.:

1. **Leveillina Arduinae** (K. et C.) Theiss. et Syd., l. c. = *Dothidea Arduinae* Kalch. et Cke., Syll. II p. 642. 5093

2. **Leveillina endocrypta** (Mont.) Th. et Syd., l. c. = *Dothidella endocrypta* (Mont.) Berl. et Vogl., Syll. IX p. 1037. 5094

Sect. 5. Hyalophragmiae

YOSHINAGELLA v. Höhn. in Sitzungsb. Akad. Wiss. Wien CXXII, 1, p. 293 (1913). — Etym. a T. Yoshinaga. — Stromata epidermidi laxe adnata, plana, centro tantum incrassata, carbonaceo-cornea, in parte mediana sterilia. Loculi in circulo marginali dispositi. Asci octospori aparaphysati. Sporidia hyalina pluriseptata. Hypostroma in epidermide evoluto. — Cnfr. Theissen et Sydow, Ann. Mycol. XIII, 1915, p 265.

1. **Yoshinagella japonica** v. Höhn., loc. cit. — Stromatibus epiphyllis, sparsis, applanatis, 1-2,5 mm. latis, irregulariter rotundatis, margine parum lobulato, verrucis nitidulis in series 2-3 fere concentricas dispositis asperatis, atris, subcorneis sed fissilibus, inferne planis et epidermidi adhaerentibus, hypostroma centrale in epidermide penetrante praebentibus, contextu parenchymatico grosse-celluloso, in medio 300-350 μ crasso, in margine lato tantum 200-250 μ attingente; loculis in circulum dispositis, 160-200 μ, ostiolo non papillato pertusis; ascis cylindraceis, superne rotundatis, 110 × 10, basi in pedicellum 30 × 4-5 attenuatis, paraphysibus filiformibus, 1 μ cr., copiosis obvallatis; sporidiis monostichis, oblongo-subfusoideis, rectis vel parum curvatis, utrinque obtusulis vel acutiusculis, hyalinis, 18-24 × 5-6, 4-cellularibus, ut videtur, sed immaturis. 5095

Hab. in foliis Quercus glaucae, in Japonia (Yoshinaga).

ELMEROCOCCUM Theiss. et Syd., Ann. Mycol. 13., 1915, p. 282.— Stromata superficialia, dothideoidea, pede centrali innata. Loculi immersi rotundati aequaliter sparsi. Asci paraphysati octospori. Sporidia 4-locularia, hyalino-chlorina.

1. **Elmerococcum orbicula** (Syd.) Sydow, l. c., *Darwiniella orbicula* Syd., Leafl. of Philipp. Bot. v. 4., 1911, art. 62 p. 1158. — Stromatibus hypophyllis, sparsis, per epidermidem erumpentibus et subsuperficialibus, orbicularibus, pulvinatis, applanato-globosis, atris, 0-33-1 mm. diam., intus pallidioribus; loculis numerosissimis, omnino immersis, 110-175 μ diam., ascis clavatis, apice rotundatis, breviter pedicellatis, 50-70 μ longis, 14-76 μ latis, octosporis; sporidiis distichis, cylindraceo-fusoideis, leniter inaequilateris, utrinque acutis, 3-septatis haud constrictis, hyalino-chlorinis, 25-32 μ longis, 4-5 μ 5096

latis; paraphysibus ascos superantibus, filiformibus, 1,5 cr.

Hab. in foliis vivis Cryptocaryae todayensis (Lauraceae), Todaya Ms. Apo, Distr. Davao ins. Mindanao in Philippin. (ELMER).

METAMERIS Theiss. et Syd., Ann. Mycol. 13., 1915, p. 342. — Stromata erumpentia, dothideoidea, linearia, loculis immersis; asci paraphysati octospori; sporidia hyalina biseptata. — Typ. gen.:

1. **Metameris japonica** (Syd.) Syd. in l. c., *Monographus japonicus* Sydow, Ann. Mycol. 10., 1912, p. 408. — Stromatibus gregariis, parallelis, sub epidermide formatis, linearibus v. lanceolatis $^3/_4$-1 mm. long., circiter 0,1 mm. latis non v. vix confluentibus, atris, epidermide medio longitudinaliter fissa cinctis; loculis ca. 8-16 in quoque stromate, conidiis, uni-vel biseriatim dispositis, globulosis, ostiolis distinctis papillulatis erumpentibus, 100-150 μ long. 80-120 μ latis; ascis cylindraceis, sessilibus, 40-70 × 7-9, octosporis; sporidiis distichis v. subdistichis, oblongo-cylindraceis, utrinque obtusis, primitus 1-, dein cellula superiore saepe iterum 1-septatis, hinc 2-septatis, non v. vix constrictis, rectis v. subrectis, hyalinis, 10-14 × 3-4, loculis inaequalibus, loculo medio plerumque leniter crassiore. 5097

Hab. in stipitibus Osmundae regalis var. japonicae (Filices), prov. Mino Kawauye-mura, Japonia (K. HARA).— *Mon. microsporo* Niessl proximus.

PHRAGMODOTHELLA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 343.— Stroma erumpens, dothideoideum, loculis immersis. Asci aparaphysati, octospori. Sporidia hyalina, triseptata. — Typ. gen.:

1. **Phragmodothella Kelseyi** (Ell. et Ev.) Th. et Syd., l. c., *Homostegia Kelseyi* El. et Ev., Syll. IX p. 1050. 5098
2. **Phragmodothella globulosa** (C. et M.) Th. et Syd., l. c., *Darwiniella globulosa* (E. et M.) Sacc., Syll. IX p. 1049. 5099

Sect. 6. Phaeophragmiae

PHRAGMODOTHIS Theiss. et Syd., Ann. Mycol. 12., 1914, p. 178; 13., 1915, p. 344. — Stroma erumpens, dothideoideum, loculis immersis. Asci aparaphysati, octospori. Sporidia brunnea triseptata.

1. **Phragmodothis asperata** (Sydow) Syd., Ann. Mycol. 13., 1915, p. 345. 5100
Montagnella asperata Syd., Ann. Mycol. X, 1912, p. 442. — Stromatibus sparsis v. aggregatis, erumpenti-superficialibus, subglobosis

v. hemisphaerico-globosis, 1,5-3 mm. diam., pulvinatis, atris, ob loculos prominulos granulosis, contextu distincto e cellulis 15-19 μ long. composito; loculis monostichis, in parte superiore stromatum sitis ad tertium usque prominulis, ovato-subconicis, 150-200 μ diam., nucleo albo farctis; ascis clavatis, saccatis v. clavato-cylindraceis, sursum attenuatis, sed ad apicem rotundatis et crasse tunicatis, 140-200 × 16-32, 6-8-sporis; sporidiis oblique monostichis, distichis v. in asci parte inferiore saepe etiam tristichis, subfusoideis, utrinque leniter attenuatis, sed apicibus rotundatis, primo hyalinis, tandem opace brunneis, 4-septatis, ad septum medium plerumque valde constrictis, 26-52 × 9-11, verrucis distinctis dense asperatis; paraphysibus nullis v. indistinctis.

Hab. ad corticem Euphorbiaé sp. (Euphorbiaceae), Wagenpadsnek distr. Pretoria, Transvaalia, Africa austr. (P. J. Pienaer).

DOTHIDEOPSELLA v. Höhn. — Ubi?

1. **Dothideopsella salicella** v. Höhnel, Ann. Mycol. 18., 1920, p. 80.— 5101
Stromatibus e cortice erumpentibus, gregariis, plerumque lineariter dispositis, elongatis v. rotundatis, uni-v. plurilocularibus, 360-500 μ long., 250 μ circ. altis; loculis rotundatis, 180-200 μ latis, 160 μ altis, apice depresse ostiolatis, ostiolo 30 μ lato. Stromate extus parenchymatico e cellulis 80-10 μ cr., intus 8-12 μ efformato; paraphysibus praesentibus; ascis numerosis, cylindraceo-clavatis, circ. 84 × 7, octosporis; sporis in asco brunneolis, singulis subhyalinis, fusoideis, apice obtusulis, plurilocularibus, 19-23 × 3-3,5; loculo superiori secundo parum latiori.

Hab. in ramulis Salicis sp. (Salicaceae), Tullnerbach Wienerwalde, Austriae (v. Höhnel).

Sect. 7. Phaeodictyae

DICTYODOTHIS Theiss. et Syd., Ann. Mycol. 13., 1915, p. 346. — Stroma erumpens, dothideoideum, loculis immersis. Asci aparaphysati octospori. Sporidia brunnea muralia. — Typ. gen.:

1. **Dictyodothis Berberidis** (Rehm) Theiss. et Syd., l. c., *Curreya Berberidis* Rehm, Syll. XVI p. 632. 5102
2. **Dictyodothis excavata** (Cke et Ell.) Th. et Syd., l. c., *Curreya excavata* (Cke et Ell.) Sacc., Syll. II p. 652. 5103

Sect. 8. Scolecosporae

TRICHOCHORA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 289. — Stromata superficialia, dothideoidea, lata basi sessilia, hypostromate sparso subcuticulare v. epidermali, hypothecio et interiore laeticolore molliusculo tenaci. Loculis rotundis immersis sparsis. Ascis paraphysatis octosporis. Sporidiis filiformibus, hyalinis, articulatis.

1. **Trichochora marginata** (Theiss.) Th. et Syd., l. c., *Ophiodotis marginata* Theiss., Ann. Mycol. X, 1912, p. 10, cum icon. — Theissen, Decad. Fl. Bras. n. 249. — Amphigena, in hypophyllo fortius evoluta et confluens; stromate dimidiato (subtus non evoluto), superficiale, maculas irregulares sistenti, scruposo-colliculoso, extus brunneo v. atro margine griseo-cincto, intus in sectione rubro brunneo, fere carbonaceo, ex hyphis dense intertextis, ca. 300 μ cr., crusta pseudoepidermali ca. 35 μ crassa, pluriloculare; peritheciis sparsis v. contiguis, globosis, parietibus propriis indistinctis ex hyphis densius intricatis, collo perbrevi crustam epidermalem perforantibus ca. 170 μ diam.; ascis clavato-cylindricis, breviter pedicellatis, 75-100 × 8-9, p. sp. 65-75 μ longis, apice rotundatis, crassiuscule tunicatis; sporis filiformibus, parallelis, septatis, hyalinis (fasciculatis flavo-viridulis) longitudine ascorum p. sp. 5104

Hab. ad folia fruticis cujusdam, Sao Leopoldo Rio Grande do Sul, Brasilia (Rick).

CASTAGNELLA Arnaud, in Bull. Soc. Mycol. Fr. 1914, p. 357 (Etym. a cl. mycologo gallico Castagne). — Parasitica in Ascomycetibus. Stroma (proprium pro parte) subplanum vel hemisphaericum, coriaceo-carbonaceum, nigrum, intus fuscum. Loculis immersis ostiolo minuto papillato. Ascis elongato-clavatis, paraphysatis, octosporis. Sporidiis fusoideo-falcatis, septatis, hyalinis.

1. **Castagnella coccifera** Arnaud, l. c. p. 358, t. XIX. — Caract. gen. Loculis 250-300 μ diam.; ascis 120 × 11, sporidiis 1-septatis, 50-55 × 3-4. — Pycnidiis globoso piriformibus 170 μ diam.; sporulis fusoideo-falcatis, 1-septatis, hyalinis, 45-50 × 3-3,5. 5105

Hab. parasiticum in Henriquesia cocciferae, Montpellier, Gallia merid.

Subfam. 2. Phyllachoreae

Sect. 1. Hyalosporae

HALSTEDIA F. L. Stevens, Bot. Gazette 69., 1920. p. 253. — Stroma superficiale non radiatum loculigerum. Asci octospori; sporidia hyalina v. subhyalina continua.

1. **Halstedia portoricensis** F. L. Stevens, l. c., tab. XIV fig. 18-19.— 5106
Stromatibus amphigenis sed in epiphyllo copiosioribus, atris, depressis, 1-4 mm. diam., superficie demum corrugata v. centro quandoque elevata, superficialibus non radiatis; loculis usque 400 μ latis, 160 μ altis; ascis octosporis cylindraceis, 68-85 × 14; sporidiis ovoideis, continuis, hyalinis v. pallide stramineis, 17 × 10.

Hab. in foliis Sideroxylonis foetidissimi (Sapotaceae), Quebradillos, Porto Rico.

TRABUTIA Sacc. — Syll. I p. 449, IX p. 601, XI p. 293, XVI p. 463, XVII p. 587, XXII p. 90 (ubique inter Sphaeriaceas).

1. **Trabutia Lonicerae** Rac. in Theiss. et Syd., Ann. Mycol. 13., 1915, 5107
p. 356. — Stromatibus epiphyllis atro-piceis, prominentibus, e rotundo subangulosis, 1 mm. latis, 280 μ altis, basi planis, ostiolis peritheciorum 5-8, minutis, non extantibus signatis, subcuticularibus, parietibus homogeneis, contextu e cellulis verticalibus conflato; loculis globosis v. ovoideis v. globoso-depressis, 130-200 μ diam.; ascis tereti-clavatis apice rotundatis, deorsum sensim tenuatis, 110-130 × 16-20, paraphysibus filiformi-clavatis obvallatis, 8-sporis, sporidiis continuis, hyalinis, levibus, anguste ovoideis, utrinque lanceolato-acutatis, rectis, 20-24 × 4-5.

Hab. in foliis Loniceraе javanicae (Caprifoliaceae), M. Pangerango, 3025 m. alt., Java (Raciborski).

2. **Trabutia Conzattiana** Sacc., Ann. Mycol. 10., 1912, p. 310. — Theiss. 5108
et Syd., Ann. Mycol. 13., 1915, p. 356, tab. III, fig. 19. — Maculis stromaticis epiphyllis, crebris, ex orbiculari angulosis, 2-3 mm. diam. brunneis, hypostromate tegente atro-brunneo submembranaceo margine eroso; peritheciis paucis, hypostromati adnatis, globoso-hemisphaericis, nitide nigricantibus, 170-190, rarius usque ad 300 μ diam., obtuse papillato-ostiolatis, contextu pachydermatico, atro, distincte pseudoparenchymatico; ascis breviter crasseque oblongo-fusoideis, sessilibus, utrinque tenuatis sed summo apice truncatis,

65-70 × 26-28, paraphysibus filiformibus saepe tortuosis, initio mucoso-coalitis obvallatis, 6-8-sporis, saepius 6-sporis; sporidiis oblongo-fusoideis, subtristichis, 30 × 9-10, inaequilateris, utrinque abrupte acuminatis, fulvo-flavidis intus minutissime granulosis, apicibus subhyalinis.

Hab. in foliis languidis Quercus sp. (Cupuliferae), Oaxaca Mexici (Cassianus Conzatti e Civezzano tridentino, horti botanici Oaxacensis director. Comm. Doct. S. Bonansea). — A *Trabutia quercina* mox dignoscitur ascis crassioribus et brevioribus (non 100 × 18) sporidiis utrinque vere acutis, fulvo-lutescentibus, intus minutissime granulosis apicibus achrois.

3. **Trabutia Conocephali** Racib. in Theiss. et Syd., Ann. Mycol. 13., 1915, p. 350. — Epiphylla, sparsa, nigro-picea, subrotundo-subangulosa, 2-6 mm. lata, convexo-applanata, 0,5 mm. alta, subcuticularis, contextu stromatis e cellulis verticalibus, nigricantibus, angustis conflato, loculis subglobosis, v. depresso-globosis, 0,5 mm. diam.; ascis paraphysatis, apice rotundatis, deorsum tenuatis, 8-sporis, 80 × 15; sporidiis ovoideis, levibus, monostichis, 12-14 × 7, continuis, hyalinis. 5109

Hab. in foliis Conocephali suaveolentis (Moraceae), pr. Tjibodas in M. Gedah Javae, frequens (Raciborski).

4. **Trabutia Elmeri** Theiss. et Syd., Ann. Mycol. 13., 1915, p. 353. — Stromatibus tantum epiphyllis in maculis decoloratis parum distinctis insidentibus, irregulariter sparsis, non v. vix greges efformantibus, 1-2 mm. diam. confluendo usque 6 mm. diam., ambitu rotundatis v. irregularibus, omnino subcuticularibus, superficie nigris undulatis; loculis depresse globosis v. lenticularibus 350-500 μ latis 150-220 μ altis; pariete basali nulla; ascis paraphysatis, clavatis, 75-90 × 14-16, octosporis, sporidiis monostichis v. distichis, oblongis, utrinque rotundatis, unilocularibus hyalinis 14-17 × 6,5-8. — Loculis conidiferis depressis; conidiis subfalcato-incurvatis, unilocularibus hyalinis, angustissimis, 14-17 × 0,75. 5110

Hab. in foliis Fici banahaensis (Moraceae), Todaya M. Apo, Mindanao, Ins. Philipp. (Elmer).

5. **Trabutia benguetensis** H. S. Yates, Philipp. Journ. Sc. XII (1917), p. 374. — Stromatibus hypophyllis, irregulariter dispersis, 1 mm. diam., vel congregatis, 3-6 mm. diam., rotundatis, atris; loculis applanatis, 450-500 μ diam., 60-70 μ altis; stroma opaco 30-35 μ crasso, interiore, ex hyphis obscure brunneis 3-4 μ crassis formato; ascis oblongo-ovatis 40 × 15, octosporis, paraphysatis; sporidiis distichis, 5111

subglobosis, 1-cellularibus, hyalinis, 6 × 5.

Hab. in foliis Fici benguetensis (Moraceae), Benguet Luzon, Ins. Philipp. — Imprimis sporidiis minutis a congeneribus ficicolis distinguitur.

6. **Trabutia vernicosa** Theiss. et Syd., Ann. Mycol. 13., 1915, p. 353.— 5112
Stromatibus epiphyllis, dense sparsis, saepius 2-4 mm. diam., raro 1 mm., alte convexis, atro-nitentibus, ambitu circulari, subcuticularibus; contextu ex hyphis parallelis, rufo-brunneis, 8-10 μ cr., prosenchymaticis conflato; loculis depresso-globosis, 200-350 × 150-200; clypeo solido, opaco 40-55 μ cr.; ascis clavatis, typice paraphysatis, 45-55 × 12-16, octosporis; sporidiis monostichis v. distichis, ovato-ellipsoideis, hyalinis, continuis, 10-12 × 7-9.

Hab. in foliis Fici heterophyllae (Moraceae), Mindoro, ins. Philipp. (E. D. Merrill).

7. **Trabutia nervisequens** (Lingelsh.) Theiss. et Syd., Ann. Mycol. 13., 5113
1915, p. 353, *Phyllachora Schweinfurthii* P. Henn. var. *nervisequens* Lingelsh., Engl. Bot. Jahrb. 39., 1907, p. 604. — Stromatibus epiphyllis in maculis decoloratis vix perspicuis ad nervos tantum evolutis insidentibus, plus minus elongatis confluentibusque, 1-2 cm. long., nitidis, subcuticularibus; loculis paucis v. numerosis, depressis, variabilibus, intus ex hyphis subparallelis 7-9 μ cr. prosenchymatice efformatis, 400-600 μ latis, 250-300 μ altis; clypeo 40-60 μ crasso, opaco; ascis cylindraceis, pedunculatis, paraphysatis, 75-110 × 11-14; sporidiis plerumque monostichis, late ellipsoideis, hyalinis, unilocularibus, 12-16 × 8-10.

Hab. in foliis Fici Hochstetteri var. glabrior (Moraceae), Godaburka Abyssinia, Africa (F. Rosen).

8. **Trabutia Fici-Dekdekenae** Bacc., F. Etiopici n./86, in Ann. di Botan. 5114
XIV, 1917, p. 135. — Stromatibus epiphyllis in maculas amplas lobatas vel irregulariter reticulato-rugulosas, planas vel depresse pulvinatas ac atras secus nervos lineariter productas, loculis conicis 450 μ latis 234 altis, intus albo-farctis, atris contiguis vel saepius sparsis, ascis octosporis cylindrico-clavatis, brevissime pedunculatis, 64 × 11, aparaphysatis, sporis ellypticis hyalinis granulatis 12-15 × 9,6 distichis.

Hab. in foliis Fici Dekdekenae (Moraceae), secus flum. Haddas, Assaorta, Erythraea, Africa (Pappi). — *Tr. nervisequens* valde affinis.

9. **Trabutia Fici-Hochstetteri** Bacc., F. Etiopici n. 87, in Ann. di Botan. 5115
XIV, 1917, p. 135. — Saccardo, Notae Mycol. XXII, 1917, p. 189,

n. 160. — Amphigena sed praesertim epiphylla : stromatibus subcuticularibus hypophyllis minutis, sparsis vel gregariis ad 2 mm. latis, saepe in maculas irregulariter reticulatas confluentibus; stromatibus epiphyllis late crustosis ambitu irregulariter lobato, secus nervos saepe productis ; impresso-punctatis multilocularibus, loculis crebris 450 μ latis 350 μ altis, ostiolo minuto perforatis ; ascis clavatis 110-120 × 16, paraphysatis ; sporidiis hyalinis ellipsoideis monostichis 14 × 8.

Hab. in foliis Fici Hochstetteri (Moraceae), Decamaré, Acchelé Guzai, Erythraea (Baldrati). — Sec. Saccardo l. c., ascis 85-95 × 7,5-9 v. usque 14 μ, sporidiis 11,5-13 × 8.

10. **Trabutia Sycomori** Baccarini, Eumyc. Somalia it., in « Missione Stefanini-Paoli » Firenze 1916, p. 196. — Stromatibus amphigenis minutis 1-2 locularibus, tunc sparsis, tunc in greges parvos subrotundos 2-4 cm. diam. appropinquatis, rarius confluentibus ; loculis 470 μ latis, 200-300 μ altis minute papillosis, ascis clavatis breviter pedicellatis octosporis paraphysatis 80 × 12-18; sporis, ellipsoideis vel rotundis 9 × 12, monostichis vel interdum distichis. 5116

Hab. in foliis Fici Sycomori (Moraceae), Afgoi Somalia it., Africa trop. (Paoli).

11. **Trabutia Evansii** Theiss. et Syd., Ann. Mycol. 13., 1915, p. 352.— Stromatibus tantum epiphyllis, in maculis vix decoloratis v. brunneolis insidentibus, parvis, rotundatis, 1 mm. diam., in greges 0,5-1 mm. diam. plus minus regulariter congestis sed non v. vix confluentibus ; folium saepe late tegentibus, subcuticularibus, ex hyphis griseo-brunneis parallelis 4-5 μ cr. efformatis ; clypeo 50-80 μ cr. opaco ; loculis 300-450 μ latis, 150-240 μ altis ; ascis cylindraceis, paraphysatis, 70-90 × 10-16 ; sporidiis distichis v. inordinatis, ellipsoideis utrinque rotundatis, unilocularibus, hyalinis, 11-14 × 8-9,5. 5117

Hab. in foliis Fici sp. (F. Caricae prox.) (Moraceae), Lourenço Marques, Africa lusitanica (leg. C. W. Howard comm. J. B. Pole Evans).

12. **Trabutia Butleri** Theiss. et Syd., Ann. Mycol. 13., 1915, p. 354.— Stromatibus epiphyllis irregulariter sparsis, in greges 1-2 cm. lat. dispositis, 1 mm. diam. v. confluendo 2-3 mm. plano-convexis, vix nitidis, sinuatis, subcuticularibus ; contextu ex hyphis parallelis 4-6 μ cr., brunneolis, prosenchymaticis conflato ; sursum atro, 30-50 μ crasso ; loculis 300-400 × 150-200 ; ascis tereti-clavatis, paraphysatis, 70-80 × 10-15, octosporis ; sporidiis 1-2-seriatis, oblongo-ellipsoideis, continuis, hyalinis, 13-16 × 6. 5118

Hab. in foliis, infra paullulum dealbatis, F i c i sp. (Moraceae), Wahja in Assam, Bengala (leg. A. L. Som, com. Butler).

13. **Trabutia novoguineensis** Theiss. et Syd., Ann. Mycol. 13., 1915, p. 354. — Stromatibus epiphyllis, supra vix maculiferis, infra flavo-rubefacentibus, late sparsis, atro-nitidis, suborbicularibus, 2-5 mm. diam., v. confluendo 2-5 mm. latis v. elongatis 8 mm. usque, subcuticularibus, contextu ex hyphis parallelis 5-8 μ cr. brunneis conflato; clypeo 40-60 μ cr., firmo, opaco; loculis valde inaequalibus, 300-400 × 120-180; ascis cylindraceis, paraphysatis, 60-85 × 12-14; sporidiis monostichis, ellipsoideis, v. ovoideis, late rotundatis, continuis, hyalinis, 10-11 × 8-9. 5119

Hab. in foliis F i c i sp. (Moraceae), Kelano, Nova Guinea (Kärnbach).

14. **Trabutia inimica** Theiss. et Syd., Ann. Mycol. 13., 1915, p. 354.— Stromatibus epiphyllis, dense dispositis, folium supra dealbantibus, infra brunneo-rubefacientibus, ex orbiculato conoideis, 0,6-0,8 mm. diam., 350-400 μ altis, saepius confluentibus, nigris, vix nitentibus, subcuticularibus; contextu ex hyphis rufo-brunneis, 8-10 μ cr. remote (40-50 μ) articulatis demum stratum minute parenchymaticum formantibus conflato; loculis majusculis, depresse ellipsoideis, 550-650 × 280-350; ascis tereti-clavatis, paraphysatis, 60-70 × 10-14; sporidiis octonis, transverse monostichis, continuis, hyalinis, oblongis utrinque rotundatis, 17-19 × 6, rectis. 5120

Hab. in foliis indeterminatis (F i c i sp.?), Congo, Africa (Vanderyst).

15. **Trabutia chinensis** Yates, Philippine Journ. of Sc. C. Bot., 1917, v. XII, n. 5, p. 314 (corr. T. chinense). — Stromatibus epiphyllis, in maculis decoloratis 1-2 mm. diam. insidentibus, solitariis v. aggregatis et tunc greges convexulos atros irregulares usque 1 cm. diam. efformantibus; loculis 1-3, lenticularibus, 250-400 μ diam. 100-125 μ alt.; ascis clavatis apice rotundatis, octosporis, 60-70 × 18-20, breviter stipitatis, paraphysibus filiformibus circumdatis; sporidiis oblique 1-2 distichis, ellipsoideis, unilocularibus, hyalinis, 16-18 × 8-9. 5121

Hab. in foliis F i c i sp. (Moraceae), Loh Fam (Lofaushan), Kwangtung Prov., China austr. (Merrill).

16. **Trabutia portoricensis** F. L. Stevens, Bot. Gazzette 70., 1920, p. 401, fig. 3. — Stromatibus in maculis subcircularibus dense insidentibus, maculis primum pallidis demum aridis et brunnescentibus; clypeo in epiphyllo prominenti nigro 80-95 μ diam., ostiolo 5122

centrali 10-15 μ diam., loculis in mesophyllo immersis; ascis irregularibus tenuiter tunicatis, octosporis, 68 × 17, paraphysatis; sporidiis inordinatis, filiformibus, oblongis, obtusis, continuis, hyalinis, 24 × 7.

Hab. in foliis Cocolobis niveae (Polygonaceae), Mayaguez, Porto Rico.

17. **Trabutia Escalloniae** (P. Henn.) Th. et Syd., Ann. Mycol. 13., 1915, p. 351, *Phyllachora Escalloniae* P. Henn., nec. Pat., in Rehm Hedwigia 40., 1901, p. (104) et Ascomyc. n. 1384. — Stromatibus irregulariter rotundatis, parum elevatis 160-180 μ altis 1,5-2 mm. latis inter cuticula et epidermide nidulantibus, contextu intus pallide flavo-brunnescenti subplechtenchymatico, supra minute parenchymatico e cellulis 3,5-4 μ cr. parietibus brunneis donatis efformato; loculis parietibus propriis nullis praeditis, depresse globosis, sparsis, 120-140 μ latis 85-100 μ altis. Sterilis. 5123

Hab. in foliis Escalloniae rubrae (Saxifragaceae), Lacus Quillen, Rep. Argentina (F. W. Neger).

TRABUTIELLA Theiss. et Syd., Ann. Mycol. 12., 1914, p. 180; 13., 1915, p. 359. Est *Trabutia* paraphysibus destituta.

1. **Trabutiella congregata** Syd., Ann. Mycol. 15., 1917, p. 223. — Stromata 1-locularia in greges orbiculares vel parum elongatos 1-3 mm. longos dense disposita, subcuticularia, minuta, 120-190 μ diam., convexa, nitida, clypeo atro usque 20 μ crasso, membrana basali plana tenuissima; asci sessiles, plerumque saccati, ad apicem plus minusve incrassati, 100-160 × 40-60, aparaphysati, 8-spori; sporae ellipsoideae, continuae, utrinque rotundatae, hyalinae, 32-38 × 18-20, distichae vel conglobatae. 5124

Hab. in foliis Heterospathae sp. (Palmae), Bulusan Volcano prov. Sorsogon, Luzon, Ins. Philipp. (M. Ramos).

CATACAUMA Theiss. et Syd., Ann. Mycol. 12., 1914, p. 280; 13., 1915, p. 371. — Stroma applanatum, inter epidermidem et stratum subepidermalem, clypeo epidermali tectum, verticaliter prosenchymatice constructum (typice); loculi immersi; asci paraphysati octospori; sporidia hyalina simplicia.

1. **Catacauma Ocoteae** F. L. Stevens, Bot. Gazette 69., 1920, p. 251. — Maculis irregularibus rotundatis 0,5-1 cm. diam. et ultra fere indefinitis utrinque visibilibus brunnescentibus; stromatibus rotundatis numerosis, sparsis, supra applanatis infra cupulatis, 1-1,5 5125

mm. diam.; clypeo hypophyllo raro epiphyllo expanso 60-110, infra cupulatis, 1-1,5 mm. diam.; clypeo hypophyllo raro epiphyllo expanso 60-110 μ crasso; loculis numerosis 300 μ diam., irregularibus; ascis 4-8 sporis, 85-102 × 7, angustis, infra longe sterilibus; paraphysibus filiformibus obvallatis, sporidiis unilocularibus, hyalinis, oblongis, 14-20 × 3,5.

Hab. in foliis Ocoteae leucoxylonis (Lauraceae), Mt. Alegrillo, Porto Rico.

2. **Catacauma Acaciae** Theiss. et Syd., Ann. Mycol. 13., 1915, p. 389.— 5126
Stromatibus epiphyllis numerosis, hypophyllis paucioribus, ambitu circularibus, 0,4-0,5 mm. latis, hemisphaerico-convexis, sordide nigris, tantum vertice nitidulis, unilocularibus, subepidermicis, 130-180 μ altis, stromate clypeiformi, hypothecio hyalino, fibroso; loculo cavitatem totam implente; ascis paraphysatis, cylindraceis, stipitatis, 80 × 8-10, p. sporif. 55-60 μ longa; sporidiis monostichis, ellipsoideis, hyalinis, continuis, utrinque rotundatis, 10-12 × 5-6.

Hab. in foliis Acaciae leucophloeae (Leguminosae), Madras, Ind. orient. (W. Mac Rae).

3. **Catacauma Dussiae** Sydow, Ann. Mycol. 18., 1920, p. 159. — Stro- 5127
mata semper epiphylla, per totam folii superficiem plus minus dense distributa, rotundata, 0,5-1 mm. diam., valde convexa, atra, nitida, subepidermalia; loculi 250-400 μ lati, 200-250 μ alti, strato basali 15-20 μ crasso brunneo, clypeo epidermali crasso opaco usque 40 μ; asci cylindraceo-clavati, copiose paraphysati, octospori, 60-70 × 14-20; sporae 1-2-stichae, oblongae, utrinque obtusae, hyalinae, 15-20 × 5-6.

Hab. in foliis Dussiae martinicensis (Leguminosae), Guadalupa (Duss).

4. **Catacauma Pterocarpi** (Syd.) Syd., Ann. Mycol. 13., 1915, p. 387, 5128
Phyllachora Pterocarpi P. et Syd. Ann. Mycol. X, 1912, p. 40. — Stromatibus epiphyllis, sparsis, minutis, rotundatis v. irregularibus, $^3/_4$-2 mm. diam., atris nitentibus; loculis parum prominulis 3-10 in quoque stromate, rotundatis, 150-200 μ diam.; ascis cylindraceo-clavatis v. clavatis, apice rotundatis, 45-80 × 15-25, octosporis; sporidiis oblique monostichis usque irregulariter distichis, late ellipsoideis, utrinque rotundatis, continuis, hyalinis, 14-18 × 8-11.

Hab. in foliis Pterocarpi angolensis (Leguminosae), Letaba Drift, Zoutpansberg, Transvaal (E. M. Doidge), Pt. saxatilis, Java, Pt. indici, Ins. Philippinis. — Cum *Phyll. Pterocarpi* Rehm comparanda (cnfr. Phyllachora) nec non cum *Plaeo-*

stroma Pterocarpi (Mass.) Th. et Syd.

5. **Catacauma valsiforme** (Rehm) Theiss. et Syd., Ann. Mycol. 13., 1915, 5129
p. 379, *Phyllachora valsiformis* Rehm, Ascomyc. Philipp. III, in Philipp. Journ. of Sci. VIII (1913) p. 398. — Stromatibus in maculis dilutissime flavidulis hypophyllis, in epiphyllo vix conspicuis adnatis, singularibus, dein 3-10 gregariis, orbicularibus, atris, nonnullis demum in maculis atramentose nigris interdum circularibus confluentibus, 1,5-2,5 mm. latis, in eorumque centro convexo, demum dilute albidulo, late nigro-marginato papillulis loculorum 2-5 innatorum protuberantibus obsessis; ascis clavatis, aparaphysatis, octosporis, 60 × 15; sporidiis distichis, oblongis, rectis, utrinque obtusis, biguttatis, hyalinis, 12 × 6.

Hab. in foliis Fici crassitorae, Luzon, Prov. Laguna, Los Baños, ins. Philipp. (Baker). — *Ph. circinatae* proxima, quae vero stromatibus epiphyllis gaudet.

6. **Catacauma Garciae** Theiss. et Syd., Ann. Mycol. 13., 1915, p. 381.— 5130
Stromatibus epiphyllis in areis viridulis, obsoletis, infra vero prominentibus 1-2 cm. latis 4-10 insertis, in greges irregulares, subinde concentricos digestis, non v. vix confluentibus, 1-3 mm. longis, 1-2 mm. lat., plerumque 2-3-locularibus; clypeo epidermico opaco, 50-65 μ cr., contextu parallele prosenchymatico, hyphis brunneis 4-5 μ cr.; loculis depresso-globosis, 300-380 × 150-220, maturitate vertice cum clypeo dehiscentibus; ascis octosporis, breviter stipitatis, 50-60 × 12-16; sporidiis oblongis utrinque obtuse tenuatis, continuis, hyalinis, 14-17 × 6-6,5.

Hab. in foliis Fici Garciae, Puerto Princesa, ins. Palawan ex Philipp. (Elmer).

7. **Catacauma lagunense** (Syd.) Syd. in Th. et Syd., Ann. Mycol. 13., 5131
1915, p. 378, *Phyllachora lagunensis* Syd., Enum. Philipp. Fungi I, in Philipp. Journ. of Sci. VIII (1913) p. 278. — Maculis epiphyllis, rotundatis, fuscidulis, 3-8 mm. diam., leniter depressis; stromatibus hypophyllis, nunquam epiphyllis, in greges maculis oppositos densiuscule distributis, minutis, non vel vix confluentibus, 0,5-1 mm. diam., rotundatis, convexis, centro nitidis, intus paucilocularibus; ascis cylindraceo-clavatis, 60-80 × 8-12, octosporis; sporidiis subglobosis vel late ellipsoideis, continuis, hyalinis, 9-11 × 7-9.

Hab. in foliis vivis Fici Hanili (Moraceae), Luzon, Prov. Laguna, ins. Philipp. — *Ph. apoensi* Syd. affinis; differt stromatibus dense aggregatis et sporidiis minoribus.

8. **Catacauma sanguineum** (Rehm) Theiss. et Syd., Ann. Mycol. 13., 1915, 5132

p. 379, *Phyllachora circinata* Syd. — Syll. XXII p. 421 — var. *sanguinea* Rehm, Ascomyc. Philipp. VI, Leaflets of Philipp. Botany, VI (1914) p. 2274. — Stromatibus epiphyllis in maculis discoidalibus sanguineis, 5 mm. usque latis et in hypophyllo conspicuis innatis.

Hab. in Fico heterophylla, Los Baños, ins. Philipp. (Baker).

9. **Catacauma Elmeri** Syd. in Theiss. et Syd., Ann. Mycol. 13., 1915, 5133
p. 378, *Phyllachora Elmeri* Syd., Leaflt. Philipp. Bot. 1911, Art. 62, p. 1157 et in l. c.; Philipp. Journ. of Sc. 1913 (C) n. 4 p. 278.— Stromatibus epiphyllis, in hypophyllo haud conspicuis, sparsis, minutis, rotundatis, 0,5-1 mm. diam., atris, intus 1-paucilocularibus; ascis clavatis vel clavato-saccatis, breviter pedicellatis, 40-60 μ longis, 11-18 μ latis, octosporis; sporidiis monostichis vel irregulariter distichis, subglobosis vel late ellipsoideis, continuis, hyalinis, 10-14 μ longis, 8-10 μ latis.

Hab. in foliis vivis Fici manilensis et F. blepharostomae, Todaya, Ms. Apo, Distr. Davao, ins. Mindanao in Philipp. (Elmer).

10. **Catacauma microcentum** (B. et Br.) Theiss. et Syd., Ann. Mycol. 5134
13., 1915, p. 384 — var. **graphica** Th. et Syd., l. c. p. 385, tab. VI fig. 6. — *Phyllachora microcenta* B. et Br., Syll. II p. 595. — Stromatibus epiphyllis, crebris, 0,5-1 mm., lineatis v. breviter extantibus, v. impressis, minute anulatis; loculis 400-500 × 250-350; sporidiis 13 × 6-6,5.

Hab. in foliis Fici mysorensis, Mysore, Ind. orient. (Butler).

11. **Catacauma nipponicum** Sydow, Ann. Mycol. XIII, 1915, p. 40 et 5135
p. 379. — Stromatibus epiphyllis, singulis etiam hypophyllis, plus minus dense sparsis vel irregulariter distributis, non vel vix confluentibus, rotundatis, ca. 1 mm. diam., valde convexis, usque 200 μ altis, atris, nitidulis, 1-vel paucilocularibus, subepidermalibus, clypeo 25-35 μ crasso; loculis lenticularibus, 90-100 μ altis, usque 400 μ longis; ascis clavatis, 44-60 × 12-15, paraphysatis, octosporis; sporidiis oblique monostichis vel distichis, continuis, ellipsoideis, hyalinis, obtusis, 12-16 × 5,5-7.

Hab. in foliis Fici nipponicae, prov. Iden, Amayi, Japonia (M. Shirai).

12. **Catacauma apoense** (Syd.) Syd., Ann. Mycol. 13., 1915, p. 379, 5136
Phyllachora apoensis Syd., Leaflt. Philipp. Bot. IV, 1911, art. 62,

p. 1157. — Stromatibus hypophyllis, in epiphyllo haud conspicuis; sparsis, rotundatis vel irregularibus, 0,5-2 mm. longis, atris, intus paucilocularibus; ascis clavatis vel clavato-saccatis, breviter pedicellatis, 50-75 μ longis, 11-18 μ latis, octosporis; sporidiis irregulariter distichis vel oblique monostichis, ellipsoideis, continuis, hyalinis, 14-18 μ longis, 7-9 μ latis.

Hab. in foliis Fici sibulanensis et F. apoensis, Todaya Ms. Apo, Distr. Davao, ins. Mindanao in Philippinis (Elmer).

13. **Catacauma urophyllum** (v. Höhn.) Th. et Syd., Ann. Myc. 13., 1915, p. 382, cum icon., *Phyllachora urophylla* v. Höhn. Fragm. zur Mykol. 772, in Stzgsb. Akad. Wiss. Wien CXXI, 1, p. 390, fig. 2 (1912). — Stromatibus hypophyllis, linearibus, nervos tegentibus ideoque interdum ramosis, 700 μ usque latis, 250 μ crassis, superne convexis inferne concavis, nitidis, ob ostiola verruculoso-punctatis, contextu violaceo-atro, minute parenchymatico; loculis longitudinaliter seriatis, 300-600 μ longis, 159 μ crassis, 400 μ usque latis; ascis clavatis subsessilibus, tenuissime tunicatis, 60 × 10-16, paraphysibus filiformibus copiose obvallatis; sporidiis monostichis vel irregulariter dispositis, breviter oblongo-cylindraceis, utrinque late rotundatis, medio subconstrictis, intus granulosis, hyalinis, 12-15 × 6-6,5. 5137

Hab. in foliis vivis Fici urophyllae, Tjibodas, Java. (Rehm, Ascomyc. exs. n. 1947).

14. **Catacauma maquilingianum** Syd., Ann. Mycol. 14., 1916, p. 364. — Stromatibus semper epiphyllis, partibus foliorum maculiformiter decoloratis brunneolis vix determinatis insidentibus, sparsis, rotundatis, 1-2,5 mm. diam., discretis raro binis confluentibus, atris convexis, nitidulis, sub epidermide evolutis; loculis 1-3 in quoque stromate, depresso-globosis, 250-450 μ latis, 170-250 μ altis, parietibus lateralibus et basali ca. 10 μ crassis; clypeo 30-40 μ crasso, opaco, aterrimo; contextu stromatibus ex hyphis 5-6 μ crassis olivaceo- vel fumoso-brunneolis composito; ascis oblongis vel clavatis, paraphysatis, 55-70 × 18-22, octosporis, J — ; sporis 1-2-stichis, ovatis vel late ellipsoideis, utrinque late rotundatis, continuis, hyalinis, 12-15 × 8-9. 5138

Hab. in foliis Fici sp., in summo vertice M. Maquiling, ins. Philipp. (C. F. Baker).

15. **Catacauma Ravenalae** (Pat. et Har.) Theiss. et Syd., l. c., *Phyllachora Ravenalae* Pat. et Har., Bull. Soc. Mycol. Fr. 28., 1912, p. 283. — Maculis nullis; stromatibus epiphyllis elongato-ellipsoideis, 5139

bullaceis, nitentibus, atris, usque 15 mm. longis, 3-5 mill. latis; loculis 3-7; ascis clavatis, brevissime stipitatis, 50-60 × 25-30, octosporis filiformi-paraphysatis; ascosporis subdistichis, hyalinis, eguttulatis, ovoideis, utrinque acutiusculis, 12-14 × 5-8.

Hab. in foliis Ravenalae madagascariensis (Musaceae), Ste-Marie de-Madagascar (Boivin).

16. **Catacauma palmicola** F. L. Stevens, Bot. Gazette, 69., 1920, p. 251, 5140
tav. XIII fig. 10-12. — Stromatibus subepidermicis, supra conspicuis infra minutis, nigris, nitidis, ovoideis, 1-6 × 1-3 mm., 300 μ cr., superficie rotundatis sparsis, solitaris v. gregariis et plus minus confluentibus; maculis effusis brunneis; loculis irregularibus 500-600 μ latis contextu infra hyalino, tenui, lateraliter brunneo crasso: clypeo nigro, 60-100 μ cr.; ascis numerosis octosporis, saccatis, tenuiter tunicatis; sporidiis inordinatis, cylindraceis, 23-43 × 12-14, hyalinis, continuis.

Hab. in foliis Thrinacis ponceanae (Palmae), Vega Baja, Porto Rico.

17. **Catacauma cubense** Theiss. et Syd., Ann. Mycol. 13., 1915, p. 391. — 5141
Stromatibus epiphyllis, circinatis, atro-nitidis, minutis, hemisphaericis, ambitu irregulariter circulari, levibus, 0,3-0,5 mm. lat. unilocularibus v. confluendo bilocularibus et tunc ellipsoideis, zona stromatica depressa, atra, 1 mm. lata cinctis; loculis 370 × 180-200, tenuiter tunicatis; ascis clavatis, parce paraphysatis, breviter stipitatis, 70-80 × 15-20; sporidiis distichis, oblongo-ellipsoideis, hyalinis, utrinque rotundatis, 16-18 × 8.

Hab. in foliis Sapindaceae cujusdam, Cuba (Wright, F. Cub. n. 865, sub nom. *Doth. repens* Berk.).

18. **Catacauma Patouillardi** F. Theiss., Verh.-zool.-bot. Ges. Wien Bd. 514
69., 1919, p. 13 (nom. nov.) — Syn. *Stigmatula nitens* (Pat.) Syd. — Syll. XVI p. 454. — Ita vocanda quia jam extat *Catacauma nitens* (Lév.) Th. et Syd. 1916.

CATACAUMELLA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 400. — Est *Catacauma* paraphysibus destituta. — Typ. gen.:

1. **Catacaumella Miconiae** (P. Henn.) Theiss. et Syd., l. c., *Phyllachora* 514
Miconiae P. Henn., Syll. XI p. 371. — Syn. *Phyll. Henningsiana* Sacc., Ann. Mycol. 1913, p. 547, *Physalospora pelladensis* P. Henn.

2. **Catacaumella Gouaniae** F. L. Stevens, Bot. Gazette, 69., 1920, p. 252, 51
tab. XIII fig. 14-15. — Plerumque epiphylla raro hypophylla. Maculis stromata vix excedentibus infra vix visibilibus; stromatibus

copiosis subrotundatis 2-3 mm. diam., rugosulis, nitide nigris subepidermicis; loculis latis, depressis, 500 μ latis 150-160 μ circ. altis, solitariis v. aggregatis in quoque stromate distincte ostiolatis; ascis tenuiter tunicatis, irregularibus octosporis, 61-68 × 10-11 inordinatis; sporidiis hyalinis unilocularibus ovoideis v. piriformibus, irregularibus 14-20 × 10; paraphysibus nullis.

Hab. in foliis Gouaniae polygamae (Rhamnaceae), Mayaguez, Salinas, Dos Bocas, Maricao, G. lupuloidis, Arecibo Lares, Porto Rico.

SCHIZOCHORA Syd., Ann. Mycol. 11., 1913, p. 265, et in Leaflets of Philipp. Bot. VI (1913) p. 1929 — Theiss. et Syd., Ann. Mycol. 13., 1915, p. 401. — Etym. *schizo*, findo et *achor*, ulcus. — Est *Catacauma* paraphysata, sporidiis hyalinis continuis utrinque appendiculatis praedita.

1. **Schizochora Elmeri** Syd., loc. cit. — Stromatibus hypophyllis, in epi- 5145
phyllo maculas obsoletas atro-fuscas efficientibus, in hypophyllo zona angusta flavidula cinctis, sparsis, hemisphaerico-prominentibus, rotundatis vel ellipticis aut oblongis, subinde etiam angulatis, 1-1,25 mm. diam., usque ad 1 mm. altis, atris, opacis, irregulariter rimose dehiscentibus; loculis 1-4 in quoque stromate, 200-300 μ diam.; ascis clavatis, apice rotundatis, sessilibus, 55-75 × 15-20, octosporis; paraphysibus numerosis, filiformibus, ca. 1 μ crassis, tandem mucosis; sporidiis distichis, oblongo-fusoideis, continuis, utrinque attenuatis, primitus minute granulosis, hyalinis, 17-20 × 6,5-8, utrinque appendicula hyalina tenui 2-4 μ longa praeditis.

Hab. in foliis vivis Fici Guyeri (Moraceae), Dumaguete, Negros Oriental, ins. Philipp. (A. D. E. Elmer).

PHYLLACHORA Nits. — Syll. II p. 594, IX p. 1006, XI p. 368, XIV p. 663, XVI p. 617, XVII p. 828, XXII p. 410.

1. **Phyllachora atro-maculans** H. et P. Sydow, Ann. Mycol. XI, 1913, 5146
p. 264; Fungi exot. ext. 132. — Theiss. et Syd., Ann. Mycol. 13., 1915, p. 477. — Stromatibus spermogonicis amphigenis, maculis atro-fuscis orbicularibus v. irregularibus 0,5-1 cm. diam. insidentibus, in maculis irregulariter v. circinatim dispositis, in utraque foliorum pagina leniter prominulis, rotundatis, $^1/_3$-$^3/_4$ mm. diam., atris, opacis; loculis paucis (1-4) in quoque stromate, globulosis; sporulis filiformibus, hyalinis, tenuissimis, 18-35 × 0,5-0,7, irregulariter curvatis; stromatibus peritheciigeris conformibus, sed minus

opacis et subinde leniter nitentibus; ascis clavatis, 80-110 × 12-18, filiformiter paraphysatis, octosporis; sporidiis oblique monostichis usque distichis, ellipsoideis v. oblongis, utrinque obtusis v. parum attenuatis, continuis, intus pluriguttulatis, hyalinis, 15-21 × 7-8.

Hab. in foliis vivis Anonae sp. (Anonaceae), San Josè, Costa-Rica (A. Tonduz).

2. **Phyllachora maquilingensis** Sydow, Ann. Mycol. 18., 1920, p. 100.— 5147
Maculae propriae nullae; stromata in epiphyllo conspicua, per totam folii superficiem dispersa, hinc inde pauca aggregata, minuta, usque 250 μ diam., nitidula, 1-locularia, clypeo epiphyllo crasso atro, hypophyllo minus evoluto; loculus usque 200 μ latus, totam folii crassitudinem occupans; asci cylindracei, apice obtusi, ca. 80 × 10-14, octospori paraphysati; sporae ellipsoideae, continuae, obtusae hyalinae, 11-14 × 6-7; conidia in stromatibus similibus aequaliter 1-locularibus oriunda, continua, oblonga, utrinque obtusa vel etiam leniter attenuata, saepe etiam uno apice late obtusa, altero acutata, hyalina, copiose evoluta, 12-16 × 4-5.

Hab. in foliis Polyalthiae spec. (Anonaceae), Mt. Maquiling, prov. Laguna, Ins. Philippin. (T. Collado).

3. **Phyllachora maculicola** Syd., Ann. Mycol. 14., 1916, p. 83. — Maculis distinctissimis, amphigenis, primitus ochraceis, dein exsiccando albido-ochraceis vel albidis, sparsis, orbicularibus, 0,5-1 cm. diam.; stromatibus in utraque foliorum pagina visibilibus, aggregatis, sed haud confluentibus, minutissimis, punctiformibus, 0,25-0,4 mm. diam. in epiphyllo nitidis, in hypophyllo opacis, leniter tantum convexis, loculum singulum includentibus; clypeo in utraque epidermide, 20-30 μ crasso, loculis globulosis, ca. 200-250 μ diam., totum mesophyllum occupantibus; ascis cylindraceo-clavatis, octosporis, paraphysatis, 80-100 × 12-15, sporidiis distichis, fusoideis, utrinque attenuatis, hyalinis continuis, 20-24 × 4-4,5. 5148

Hab. in foliis Aspidospermatis sp. (Apocynaceae), Seringal Auristella, Rio Acre, Peruvia (E. Ule).

4. **Phyllachora Ajrekari** H. et P. Syd., Ann. Mycol. X, 1912, p. 408; 5149
Fungi exot. exsicc. 259; Theiss. et Syd., Ann. Mycol. 13., 1915, p. 548. — Stromatibus amphigenis, sparsis, irregularibus, subinde confluentibus, 1,5-5 mm. diam., opacis, atris, in epiphyllo levibus, in hypophyllo ob loculos prominulos saepe leviter rugosis; loculis numerosis (15-40) in quoque stromate, rotundatis v. irregularibus, 150-225 μ diam.; ascis cylindraceo-clavatis, 80-100 × 13-16, octosporis; sporidiis oblongo-fusoideis, utrinque obtuse attenuatis, con-

tinuis, hyalinis, intus guttulatis, 20-25 × 5-6.

Hab. in foliis petiolisque C e r o p e g i a e ? h i r s u t a e (Asclepiadaceae), Matheran Bombay Presid., Indiae or. (S. L. AJREKAR).

5. **Phyllachora Dischidiae** Syd., Enum. Philipp. Fungi I, in Philipp. Journ. of Sci. VIII (1913), p. 277. — Stromatibus in utraque foliorum pagina conspicuis, sparsis, rotundatis, 1-2 mm. diam., atris, opacis, planiusculis, sublevibus, loculos 12-25 includentibus; ascis cylindraceis, apice obtusis, brevissime stipitatis, indistincte paraphysatis, 85-105 × 9-11, octosporis; sporidiis distichis, fusiformibus, continuis, hyalinis, 24-27 × 5-6. 5150

Hab. in foliis vivis D i s c h i d i a e r o s e a e (Asclepiadaceae), Luzon, Prov. Bataan, Mt. Mariveles, ins. Philipp. (MERRILL).

6. **Phyllachora Metastelmae** F. L. Stevens et N. Dalby, Bot. Gazette 68., 1919, p. 57, tab. fig. 15-16. — Stromatibus nitide nigris 1-2 mm. latis, 5-15 mm. long., caulem circumdantibus et totum contextum corticis occupantibus; loculis circ. 200 μ diam. 120 μ altis; ascis octosporis; sporidiis cylindraceis hyalinis, continuis, 14 × 5. 5151

Hab. in caulibus M e t a s t e l m a e sp. (Asclepiadaceae), El Alto de la Bandera, Porto Rico.

7. **Phyllachora ? Ostryae** P. Henn. (corr. Ph. Ostreae) in Engler Bot. Jahrb. 29., 1900, p. 151. — Theiss. et Syd., Ann. Mycol. 13., 1915, p. 570. — Sec. Theiss. et Syd. l. c. minime *Phyllachora* sed potius *Mamiania* et tunc *Mam. Ostryae* (P. Henn.) Th. et Syd. vocanda (Betulaceae). 5152

8. **Phyllachora nitens** Ph. Garman, Mycologia v. VII, 1915, p. 339.— Stromate maculam latam nigram nitidam efformante, quandoque aream 1 cm. et ultra latam tegente; ascis clavatis, octosporis, 100-110 × 12-16; sporidiis plerumque ovatis, uno apice acutiusculis, hyalinis et leniter granulosis, 10-12 × 6-8; paraphysibus praesentibus. 5153

Hab. in foliis S c h l e g e l i a e b r a c h y a n t h a e (Bignoniaceae), Porto Rico: Maricao, Ponce, Monte Alegrillo, Rio Grande, Prestons Ranch.

9. **Phyllachora Bourreriae** F. L. Stevens et N. Dalby, Bot. Gazette 68., 1919, p. 54, tab. fig. 3-4. — Maculis nullis. Stromatibus circularibus et nigris, copiosis, irregulariter sparsis, 1-2 mm. diam., utrinque aeque prominentibus, in mesophyllo evolutis; clypeo in epidermide amphigeno sed leniter perithecia excedenti; loculis numerosis, globulosis, 160 μ circ. diam. parietibus definitis; ascis cylindraceis octosporis, 85 × 9-12; sporidiis hyalinis unilocularibus, 12-16 × 6-7, 5154

Hab. in foliis Bourreriae succulentae (Borraginaceae), Vega Alto, Joyuda, Porto Rico.

10. **Phyllachora caffra** (Syd.) Theiss. et Syd., Ann. Mycol. 13., 1915, 5155
p. 548, *Physalospora caffra* H. et P. Syd., Ann. Mycol. X, 1912, p. 39. — Peritheciis maculis pallidis v. brunneolis indeterminatis saepe confluentibus insidentibus, densiuscule aggregatis, profunde immersis, utraque foliorum pagina conspicuis, globosis, atris, papillatis, 150-200 μ diam.; ascis cylindraceis, apice rotundatis, 75-90 × 9-12, filiformiter paraphysatis, octosporis; sporidiis monostichis, late ellipsoideis, continuis, hyalinis, 11-13 × 6-8.

Hab. in foliis Cordiae caffrae (Borraginaceae), Amanzimtote Natal, Africae austr. (E. M. Doidge).

11. **Phyllachora Espeletiae** Syd. ap. Fuhrmann et Mayor, Voy. Expl. 5156
Scient. Colombie, in Mém. Soc. neuchât. Sc. Nat. V p. 436 (1913); Theiss. et Syd., Ann. Myc. 13., 1915, p. 556. — Stromatibus epiphyllis, irregulariter sparsis, rotundatis vel irregularibus, conico-prominulis 0,5-2 mm. latis, atris, opacis, glabris, intus 1-3-locularibus; ascis cylindraceis vel clavatis, apice rotundatis, 95-120 × 16-20, octosporis; sporidiis late ellipsoideis, utrinque subinde leniter acutiusculis, saepe inaequilateris, continuis, hyalinis, 15-20 × 9-11.

Hab. in foliis Espeletiae corymbosae (Compositae), in regione andina (dep. Cundinamarca) in Columbia, alt. 2800-3300 m.

12. **Phyllachora perlata** Syd. ap. Fuhrmann et Mayor, Voy. Expl. Scient. 5157
Colombie, in Mém. Soc. neuchât. Sc. Nat. V p. 436 (1913). — Stromatibus hypophyllis, hemisphaerico-prominulis, in epiphyllo etiam conspicuis sed non prominentibus, sparsis, solitariis vel hinc inde paucis aggregatis et subconfluentibus, minutis, rotundatis, $^1/_3$-$^3/_4$ mm. diam., levibus, glabris, nitidulis, aterrimis, intus plerumque 1-raro 2-locularibus; ascis cylindraceis, apice obtusis, 80-120 × 11-14, octosporis; sporidiis monostichis, late ellipsoideis, continuis, utrinque late rotundatis, hyalinis, 13-16 × 8-12.

Hab. in foliis Polymniae glabratae (Compositae), in Andis orientalibus (dép. Cundinamarca) in Columbia, alt. 2400-3200 m.

13. **Phyllachora vernoniicola** P. Henn. — Syll. XVII p. 836 — var. **mi-** 5158
crospora Theiss. et Syd., Ann. Mycol. 13., 1915, p. 558; Theiss., Decad. F. Brasil. 87 (sub *Ph. vernoniicola* P. H.). — Stromatibus in maculis pallescentibus indistincte rotundatis 3-5 mm. diam. insidentibus, $^1/_3$ mm. cr., utrinque nitide nigris elevatis; ascis cy-

lindraceis pedunculatis, paraphysatis p. sp. 55-60 × 8-10; sporidiis ellipsoideis, 9-12 × 5,5-6,5.

Hab. in foliis Vernoniae Tweedianae (Compositae), Rio Grande do Sul, Brasilia (J. Rick).

14. **Phyllachora leopoldensis** Theiss. et Syd., Ann. Mycol. 13., 1915, 5159
p. 563. — Rehm, Ascom. 1791 (sub *Physalosp.? varians* Starb.).— Stromatibus epiphyllis punctiformibus, in maculis sparsis 2-5 mm. latis griseo-ferrugineo-brunneis insidentibus; stromatibus, quandoque etiam hypophyllis, nitidulis, 150-200 μ crassis, unilocularibus, loculis globosis 180-200 μ diam.; clypeo parum evoluto; ascis cylindraceo-clavatis, paraphysatis, 65-78 × 11-16; sporidiis ellipsoideis, monostichis v. distichis, hyalinis, unilocularibus, utrinque rotundatis, 12-15 × 7-8.

Hab. in foliis ignotis (? Compositae), Sao Leopoldo, Rio Grande do Sul, Brasilia (Rick).

15. **Phyllachora Connari** Syd., Philipp. Journ. of Sc. IX, 1914, n. 2 5160
p. 168; Theiss. et Syd., Ann. Mycol. 13., 1915, p. 487. — Stromatibus sparsis, innatis, in utraque foliorum pagina conspicuis, minutis, rotundatis vel angulatis, non confluentibus, 1-3 mm. longis, atris, in epiphyllo planis opacis, in hypophyllo ob loculos prominulos parum nitidulos rugulosis; loculis 10-40 in quoque stromate, globosis; ascis cylindraceo-clavatis, subsessilibus, 70-88 μ longis, 10-13 μ latis, octosporis; sporidiis oblique monostichis usque distichis, oblongis, utrinque rotundatis, saepe superne angustioribus continuis, hyalinis, 16-18 × 3,5-4.

Hab. in foliis Connari (Connaraceae), Palawan, Ins. Philipp. (Merrill).

16. **Phyllachora connarina** Racib. in Theiss et Syd., Ann. Mycol. 13., 5161
1915, p. 487. — Stromatibus rotundatis v. rotundato-polygoniis, 2-3 mm. latis nervulis limitatis, in maculis rubridis violaceo limitatis insidentibus; stromatibus depressis 8-20-locularibus, loculis rotundatis, in hypophyllo ostiolatis, 100-125 μ latis et altis; paraphysibus filiformibus, aegre conspicuis; collabescentibus; ascis elongato-cylindraceis, 86-95 × 6, octosporis; sporidiis levibus hyalinis, ellipsoideis, monostichis, 6-7 × 3, utrinque rotundatis.

Hab. in foliis juvenilibus Connari sp. (Connaraceae), Depok prope Buitenzorg. — A *Ph. Connari* Syd. sporidiis praecipue diversa.

17. **Phyllachora Roureae** Syd., Enum. Philipp. Fungi I, in Philipp. Journ. 5162
of Sci. VIII (1912) p. 277; Syd., Fung. exot. exs. 187. — Stromatibus epiphyllis, in hypophyllo etiam visibilibus, zona ochraceo-

brunnea 1 mm. circ. lata circumdatis, immersis, planis, haud prominulis, rotundatis, 1,5-2,5 mm. diam.; loculis 5-10 in quoque stromate, minutis; stylosporis filiformibus, rectis vel leniter curvatis, uno fine saepe latioribus quam altero, hyalinis, continuis, 24-46 × 1-1,5; ascis sporidiisque.... immaturis tantum visis.

Hab. in foliis vivis Rourëae erectae (Connaraceae), Luzon, Prov. Bataan, Mt. Mariveles, ins. Philipp. (P. W. Graff).— Species rursus inquirenda, et potius ut *Phyllachora* delenda — Cnfr. Theiss. et Syd., Ann. Mycol. 13., 1915, p. 575.

18. **Phyllachora Pycrei** Syd., Ann. Mycol. 15., 1917, p. 226. — Stro- 5163
mata sparsa, elliptica vel oblonga, 1-2 mm. longa 0,5-1 mm. lata, parum nitidula, vix vel leniter convexa atra, amphigena, clypeo epidermali 20-25 μ crasso; loculi copiosi in quoque stromate, densissime stipati, globosi vel e mutua pressione angulati vel compressi, 80-160 μ diam., totam folii crassitudinem occupantes, parietibus brunneis 10 μ crassis; asci cylindracei, stipitati, paraphysati, 70-90 × 9-10; sporae fusoideae, continuae, hyalinae, utrinque acutae, 15-20 × 4-5.

Hab. in foliis Pycrei polystachyi (Cyperaceae), Manila, Ins. Philipp. (M. Ramos). — *Ph. Cyperi* affinis.

19. **Phyllachora schoenicola** H. et P. Sydow, Ann. Mycol. XI, 1913, p. 5164
265. — Theiss. et Syd., Ann. Mycol. 13., 1915, p. 464. — Stromatibus in utraque foliorum pagina conspicuis, sparsis v. pauci-aggregatis et confluentibus, 0,5-3 mm. long., 0,5-1 mm. latis, modice prominentibus, aterrimis, superficie non rugulosis, minoribus 1-locularibus, majoribus plurilocularibus; loculis majusculis, 150-200 μ diam., ascis cylindraceis v. cylindraceo-clavatis, 75-95 × 9-14, octosporis; paraphysibus numerosis, guttulatis, ascos superantibus, filiformibus, 1,25-1,5 μ crassis; sporidiis distichis, fusiformibus, utrinque attenuatis, saepe acutis, continuis, hyalinis, 20-25 × 5-7, plasmate subinde bipartito, tandem spurie septatis (?).

Hab. in foliis vivis Schoeni Apogi (Cyperaceae), Mt. Banahao, ins. Philippinensium (E. B. Copeland).

20. **Phyllachora Embeliae** v. Höhnel, Ann. Mycol. 18., 1920, p. 92.— 5165
Maculis foliicolis rotundatis, subconfluentibus, rubro-violaceis, 1 cm. latis; peritheciis epiphyllis numerosis gregariis subconcentrice dispositis, immersis, ostiolo carbonaceo tantum prominentibus, globosis apice subconoideis 300 μ cr.; membrana peritheciorum molli pallida hinc inde rubro-brunnea 4-16 μ cr., subfibrosa; ostiolo rotundato-anguloso demum 20-30 μ lato; paraphysibus numerosis, fili-

formibus, collabescentibus; ascis plerumque cylindraceis tenuiter tunicatis sessilibus 65-80 × 8-9; sporis late ellipsoideis, hyalinis, tenuiter tunicatis intus granulosis, plerumque monostichis, 8-10 × 6-7.

Hab. in foliis vivis Embeliae pergamenae (Diapensiaceae), prope Depok, Ins. Java (M. Raciborski). — Huic proxima sec. v. Höhnel *Physalospora circinnans* Pat. 1902.

21. **Phyllachora secunda** v. Höhnel, Ann. Mycol. 18., 1920, p. 93. — Phyll. Embeliae v. Höhn. proxima a qua differt peritheciis non concentricis; apice peritheciorum obscure rubro-brunneo nec carbonaceo, sporidiis majoribus, 12-14 × 8-9, ascis etiam majoribus 96 × 8-10. 5166

Hab. in foliis Embeliae Ribis (Diapensiaceae), prope Depok, Ins. Java (M. Raciborski).

22. **Phyllachora oblongispora** Syd. in Leaflets of Philipp. Bot. VI (1913) p. 1928; Theiss. et Syd., Ann. Mycol. 13., 1915, p. 533. — Stromatibus in utraque foliorum pagina conspicuis, planis, rotundatis, 1-2 mm. diam., atris, opacis, intus plurilocularibus; ascis subclavatis, 60-70 × 12-15, octosporis; sporidiis distichis, oblongis, saepe leniter curvatis, utrinque rotundatis, continuis, hyalinis, 14-17 × 4-5,5. 5167

Hab. in foliis vivis Dipterocarpi subalpini (Dipterocarpaceae), Cabadbaran, Mindanao, ins. Philipp.

23. **Phyllachora Mabae** (P. Henn.) Theiss. et Syd., Ann. Mycol., 13., 1915, p. 546, *Dothidella Mabae* P. Henn., Hedw. vol. 48 (1918) p. 8. — Stromatibus amphididymis, sparsis vel aggregatis, plano-pulvinatis, rotundatis, atris, opacis, 1-2 mm. diam.; peritheciis immersis, subglobosis, obtuso-ostiolatis; ascis fusoideis vel clavatis, obtusis, octosporis, 50-75 × 8-15, paraphysatis; sporidiis oblique monostichis vel distichis, oblongo-fusoideis vel clavatis, hyalinis, continuis, dein medio 1-septatis, 18-24 × 5-7. 5168

Hab. in foliis Mabae inconstantis (Ebenaceae), Morro Pellado, S. Paulo, Brasilia.

24. **Phyllachora Bischofiae** Syd. in Syd. et Butler, Ann. Mycol. IX, 1911, p. 396. — Stromatibus amphigenis sparsis, minutis, rotundatis v. irregularibus, 0,5-1,5 mm. longis et latis, atris, zona angusta albida vel cinerea e matricis contextu formata cinctis, subinde tandem deciduis et folium perforatum relinquentibus, loculis minutis, pluribus (5-20), leniter prominulis; ascis fusoideo-clavatis, sursum attenuatis, brevissime stipitatis, 60-80 × 10-17, copiose paraphysatis, octosporis; sporidiis distichis, fusoideo-cylindraceis, utrinque attenuatis v. uno fine obtusis, continuis, 20-26 × 5-6,5. 5169

Hab. in foliis Bischofiae javanicae (Euphorbiaceae), Panora Wynaad, Indiae or. (W. Mc Rae).

25. **Phyllachora drypeticola** F. L. Stevens et N. Dalby, Bot. Gazette 68., 1919, p. 55, tab. fig. 7-8. — Maculis stromata non excedentibus; stromatibus numerosis, nigris, utrinque visibilibus, 1-2 mm. diam., clypeo stromata non excedenti; loculis rotundatis v. irregularibus, 100-200 × 125; ascis cylindraceis octosporis; sporidiis 17 × 3,5, continuis, hyalinis. 5170

Hab. in foliis Drypetes sp., Rio Tanamà prope Arecibo, Drypetes glaucae (Euphorbiaceae), El Gigante, Utuado, Maracao, Mayaguez, Porto Rico.

26. **Phyllachora Glochidii** Syd., Leaflt. Philipp. Bot. IV, 1911, Art. 62, p. 1157. — Theiss. et Syd., Ann. Mycol. 13., 1915, p. 525. — Stromatibus epiphyllis, sparsis, minutis, ca. 1 mm. diam., rotundatis, atris, 1-paucilocularibus; ascis cylindraceis, brevissime pedicellatis, apice rotundatis, 60-90 μ longis, 9-13 μ latis, octosporis; sporidiis oblique monostichis ellipsoideis, utrinque rotundatis, continuis, hyalinis, 14-16 μ longis, 5-7 μ latis. 5171

Hab. in foliis Glochidii mindanaensis (Euphorbiaceae), Todaya ins. Apo, Distr. Davao, ins. Mindanao, in Philipp. (Elmer).

27. **Phyllachora subbrachyspora** Spegaz., Rel. Mycol. trop. etc., in Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 129. — Maculae nullae v. parvae pallescentes indeterminatae; stromata epiphylla innato-superficialia, suborbicularia 3-4 mm. diam. atra nitidula; loculi sat numerosi irregulares gyroso-daedaloidei; asci subcylindracei v. leniter obclavati, apice obtusi, postice modice attenuato-pedicellati, parce grosseque pseudo-paraphysati, octospori; sporae monostichae v. subdistichae late ellipticae utrinque obtusissime rotundatae laeves hyalinae. 5172

Hab. ad folia viva Cascariae sp. (Flacourtiaceae), prope Apiahy, Brasilia (J. Puiggari).

28. **Phyllachora brachyspora** Spegaz., Rel. Mycol. trop. etc., in Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 128. — Maculae nullae v. parvae indeterminatae epiphyllae; stromata innato-superficialia epiphylla suborbicularia 1,5-2 mm. diam. atra nitidula, loculis sat numerosis subglobosis parvis periphaericis; asci cylindracei breviuscule crasseque pedicellati, aparaphysati, 65-70 × 9-12; sporae ex elliptico subglobosae, utrinque late rotundatae, laeves, hyalinae, 10 × 6-7. 5173

Hab. ad folia viva Casearia e sp. (Flacourtiaceae), prope Apiahy, Brasilia (J. Puiggari).

29. **Phyllachora Xylosmatis** Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires XXIII (1912) p. 93. — Maculis nullis; stromatibus epiphyllis, subparvis, innato-prominulis, 5-20 inordinate vel subcircinatim gregariis, colliculosis, atris, levibus, nitidulis; loculis in quoque stromate 2-5, saepe subconfluentibus, semilenticularibus, 180-200 μ diam., albo-farctis; ascis subcylindraceis, apice obtusissimis vel subtruncatis, deorsum attenuatis et breviter pedicellatis, 90-120 × 12-20, non vel parce paraphysatis; sporidiis oblique monostichis, ellipsoideis, utrinque acutiuscule rotundatis, hyalinis, grosse 1-guttulatis, 18-20 × 11-12. 5174

Hab. in foliis vivis Xylosmatis pubescentis (Flacourtiaceae), prope Calilegna, Argentina.

30. **Phyllachora Costaericae** Trott. n. nov., *Phyllachora Pittieri* Spegaz. Fungi Costaric. nonn. in Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 207, nec Theiss. et Syd. 1915. — Stromata epiphylla parva repandula, colliculoso-convexula, aterrima laevia nitida, loculis, paucis majusculis, 150-200 μ diam., albo-farctis; ascis linearibus mox diffluentibus, 90-120 × 11-13; sporidiis mediocribus subcylindraceis obtusis non v. vix inaequilateralibus, 15-16 × 7-9. 5175

Hab. in foliis vivis Xylosmatis Salzmanni (Flacourtiaceae), prope Carthaginem, Costarica, America trop.

31. **Phyllachora assimilis** Theiss. et Syd., Ann. Mycol. 13., 1915, p. 439.— Stromatibus folium perforantibus, solitariis v. paucis seriatis, ex ellipsoideis linearibus, 0,5-1,25 mm. long., opace nigris, convexis; clypeo effuso, bilaterali, 20-35 μ cr., opace nigro, compacto; loculis depresse globosis, 150-220 μ cr., parietibus fibrosis, brunneis 10 μ circ. cr.; ascis paraphysatis, cylindraceis v. subglobosis, breviter pedicellatis, 75-95 × 10-13, octosporis; sporidiis recte v. oblique monostichis, ellipsoideis, late rotundatis, unilocularibus, hyalinis, 11-15 × 6-8; loculis conidiferis parvis, lenticularibus, dimidium folium occupantibus; conidiis filiformibus, unilocularibus, hyalinis, 13-17 × 1. 5176

Hab. in foliis Andropogonis assimilis (Graminaceae), Kumaon, Himalaya (Inayat), Dehra Dun (E. J. Butler), A. micranthi Maymyo Burma, Indiae or. (Butler).

32. **Phyllachora fragosoana** Maire, Bull. Soc. N. H. dell'Afr. du Nord 1917, p. 170, *Phyll. Bromi* var. *Andropogonis* Sacc., Ann. Myc. 12., 1914, p. 285 (non *Phyll. Andropogonis* Karst. et Har.). — Stroma- 5177

tibus oblongis, 1000-1200 × 160, loculis numerosis parum distinctis, 200 μ diam.; ascis 115-120 × 11,5-12, paraphysatis, octosporis; sporidiis ellipsoideis utrinque rotundatis, 11-14 × 9, saepius oblique monostichis, hyalinis.

Hab. in foliis Andropogonis hirti (Graminaceae), prope Sevilla, Hispania (Fragoso) et pr. Alger, Afr. bor. — Socia adest *Stagonospora* (Placosphaerina) *myriospora* Pat.

33. **Phyllachora andropogonicola** Speg., Mycet. Argent., Anal. Mus. Nac. 5178
Buenos Aires XXIII (1912) p. 90. — Stromatibus sparsis minutis, elongatis, 0,5-2 mm. long. 200-250 μ latis, erumpentibus, nigris, colliculosis, subcarbonaceis, contextu parenchymatico saepius indistincto; loculis in quoque stromate 5-10 seriatis, subglobosis, 170-180 μ diam., saepe confluentibus, astomis?, albo-farctis; ascis cylindraceis infra medium sensim attenuatis et breviter pedicellatis, 100-120 × 15-18, paraphysibus filiformibus parum longioribus obvallatis; sporidiis plerumque oblique monostichis, ellipsoideo-rhomboideis, utrinque acutissimis, non vel vix inaequilateris, grosse 1-guttatis, hyalinis, 20 × 8.

Hab. in foliis vaginisque Andropogonis saccharati (Graminaceae), in pratis prope Bompland, Misiones, Argentina.

34. **Phyllachora Anthephorae** Sydow, Ann. Mycol. XIII, 1915, p. 39 et 5179
p. 439. — Stromata densiuscule sparsa, utrinque visibilia, saepe longitudinaliter seriata, elliptica, subopaca, minutissima, confluendo usque 1-1,5 mm. longa, convexula, clypeo epidermali plerumque epiphyllo 25-30 μ crasso opaco, hyphis stromaticis in mesophyllo paucis; loculis approximatis, folii altitudinem subattingentibus, applanato-globosis, 150-200 μ latis, 140-170 μ altis, membrana 10-14 μ crassa; ascis cylindraceis, copiose paraphysatis, 60-70 × 10-14, octosporis; sporidiis oblique monostichis, ellipsoideis, continuis, hyalinis, 11-13 × 7-9.

Hab. in foliis Anthephorae hermaphroditae (Graminaceae), Kingston, Hope Gardens, Jamaica (Eug. Mayor).

35. **Phyllachora Anthistiriae** Racib. in Theiss. et Syd., Ann. Mycol. 13., 5180
1915, p. 439. — Stromatibus solitariis, rotundatis, in epiphyllo nigris in hypophyllo e brunneis nigris rotundatis et 0,6-1 mm. lat. v. ovoideis et tunc usque ad 2 mm. long. in maculis elongato-ovoideis brunneis rubro marginatis insidentibus; hyphis intercellularibus, in epiphyllo magis copiosis, plagas nigras efformantibus in quas 3-5 perithecia globoso-depressa insidentia; cavitate perithecii usque 200 μ lata, 100-150 μ alta; parietibus obscure brunneis v. nigris,

ostiolo punctiformi, non prominenti; paraphysibus prominentibus; ascis cylindraceis, apice depresse rotundatis, 70-80 × 7-9, octosporis; sporidiis hyalinis, levibus, tenuiter tunicatis, elongato-ovoideis, 11-12 × 4-5.

Hab. in foliis Anthistiriae ciliatae (Graminaceae), Buitenzorg, Java.

36. **Phyllachora striatula** Theiss. et Syd., Ann. Mycol. 13., 1915, p. 440. — Stromatibus in utraque pagina foliorum visibilibus, sparsis v. seriatis, linearibus 0,5-1 mm. long. 0,1-0,2 mm. latis, quandoque punctiformibus, opace nigris, prominentibus, uni-v. paucilocularibus; clypeo epidermico, crasso, nigro, 20-40 μ cr., unilaterali; loculis totam crassitudinem fere occupantibus, 200-250 μ cr., parietibus lateralibus brunneis 10-15 μ cr.; ascis cylindraceo-clavatis 70-100 × 10-15, paraphysatis, octosporis; sporidiis monostichis v. subdistichis, ellipsoideis, utrinque obtusis, 1-locularibus, hyalinis intus aeque minuteque granuluso-farctis, 11-14 × 7-8. 5181

Hab. in foliis Oxonopi semialati (Graminaceae), Carolina, Transvaal (J. Burtt Davy).

37. **Phyllachora caespiticia** Theiss. et Syd., Ann. Mycol. 13., 1915, p. 441, *Phyll. bonariensis* Speg. var. *tonkinensis* Roum., Rev. Mycol. 1891 p. 77 (nom. nud.), Fungi sel. exs. n. 5643, non *Phyll. tonkinensis* Sacc. — Stromatibus epiphyllis, plerumque arcte gregariis, ellipsoideis $^1/_3$-$^1/_2$ mm. long. $^1/_4$ mm. latis, rotundato-prominentibus, nitidulis, in hypophyllo punctiformibus macula pallide flava circumdatis, unilocularibus; loculis depresse globoso-ellipsoideis 300-380 μ long. 200-250 μ latis 140-160 μ altis, supra et infra clypeo epidermico tectis (clypeo hypophyllo breviore et tenuiore) lateraliter parietibus stromaticis destitutis; ascis paraphysatis, clavatis, breviter pedicellatis, 60-70 × 11-14, octosporis; sporidiis monostichis v. distichis, elongato-ellipsoideis, hyalinis, unilocularibus, utrinque angustatis sed non acutatis, 12-15 × 5-6. 5182

Hab. in foliis Bambusae (Graminaceae), Tonkin, Cina (Balansa).

38. **Phyllachora orbicula** Rehm, Ascomyc. Philipp. V, Leaflets of Philipp. Botany, VI (1914) p. 2221. — Stromatibus maculis dilute flavidulis utrinque foliorum paginae innatis, in epiphyllo evolutis, sparsis, atris, orbicularibus, 0,5-0,8 mm. latis, glabris, vix conspicue papillulatis, loculis 1-3 globosis innatis; ascis clavatis, sessilibus, filiformi-paraphysatis, 60 × 10; sporidiis distichis, oblongis, utrinque rotundatis, non guttatis, 10-12 × 5-5,5. 5183

Hab. in foliis Bambusae Blumeanae, Luzon, Prov. Laguna, Los Baños, ins. Philipp. (S. A. Reyes). — *Ph. graminis* (Pers.) Fuck. stromatibus majoribus, ascis cylindraceis diversa. — Sec. Theiss. et Sydow, Ann. Myc. 13., 1915, p. 441 : ascis 55-70 × 10-13, sporidiis ellipsoideis v. elongato-ellipsoideis, 12-16 × 5,5-6,5.

39. **Phyllachora Bambusae** (Syd. et Butl.) Syd. et Butl. in Th. et Syd., Ann. Mycol. 13., 1915, p. 441, *Metachora Bambusae* Syd. et Butl., l. c. p. 400. — Stromatibus in maculis fuscis oblongis v. linearibus indeterminatis insidentibus, ex utraque foliorum pagina plus minus globose v. semiglobose erumpentibus, $^1/_3$-$^1/_2$ mm. diam., atris, carbonaceis, phyllachoroideis, intus unilocularibus, contextu minute parenchymatico; ascis cylindraceis 100-150 × 10-16, pedicellatis, octosporis, filiformiter paraphysatis; sporidiis di-tristichis, oblongo-cylindraceis, continuis, hyalinis, 18-32 × 4-5. 5184

Hab. in foliis vivis v. languidis Bambusae, Kanouth Malabar, Indiae or. (E. J. Butler).

40. **Phyllachora malabarensis** Syd. et Butl., Ann. Mycol. IX, 1911, p. 398; Theiss. et Syd. 13., 1915, p. 443. — Maculis nullis v. indeterminatis, flavidis; stromatibus epiphyllis, rarius etiam hypophyllis, innatis, plano-convexis, solitariis, oblongis, ellipticis v. sublinearibus, 0,5-1,5 mm. long. 0,5-1 mm. latis, atris, glabris, opacis, per aetatem subrimose dehiscentibus, contextu indistincto; loculis 4-8 in quoque stromate majusculis; ascis clavatis, apice obtusis, breviter pedicellatis, 70-100 × 17-26, octosporis; sporidiis oblongis v. fusoideis, continuis, hyalinis, intus minute granulatis, utrinque obtusis, 27-35 × 9-14, distichis. Stromatibus spermogonicis plerumque minoribus; sporulis filiformibus, valde curvatis, plerumque falcatis, hyalinis, non septatis, nec guttulatis, 25-35 × 1,5-2. 5185

Hab. in foliis Bambusae sp., Wynaad, Malabar, Indiae or. (E. J. Butler). — *Ph. Tjangkorreh* Rac. et *Ph. eximiae* Syd. affinis differt vero ascis minoribus sed sporis majoribus.

41. **Phyllachora sinensis** Sacc., Philipp. Journ. of Sc. Manila, P. I., 1921, p. 600. — Stromatibus minutis, subcircularibus, amphigenis in maculis flavidis innatis, paucilocularibus, loculis epiphyllis non v. vix emergentibus; ascis cylindricis, praelongis, 190 × 9-11; sporidiis monostichis, fusoideis, utrinque obtusatis, 28 × 9; hyalinis, farctis. 5186

Hab. in foliis vivis Bambusae sp., Fukien, Foochow, Cina (Skvortzow). — *Phyll. eximiae* Syd. (in Arundinaria) affinis, differt imprimis ascis multo angustioribus.

42. **Phyllachora megastroma** Pat., Bull. Soc. Mycol. 1914, p. 345. — 5187
Stromatibus amphigenis, macula arida flava insidentibus, carbonaceo-coriaceis, atris, elongatis (1-15 mm. longis, 1-2 mm. latis), sulcis pluribus, linearibus notatis; perithecis paucis (2-6) albofarctis, poro pertusis; ascis cylindraceis 90-140 × 8-10, octosporis; paraphysibus numerosis, hyalinis, ramosis; sporidiis uniseriatis, ellipticis, hyalinis, 15-18 × 6, crasse tunicatis, contentu viridulo, granuloso, vel 2-guttulatis.

Hab. parasitica in foliis Bambusaceae cujusdam, M' Brès, Congo, Africae (Baudon).

43. **Phyllachora graminis** (Pers.) Fuck. — Syll. II p. 602 fm. **Bambusae** 5188
Har. et Pat. in Bull. Mus. Hist. Nat. Paris 1911, p. 368. — Ascis 100 × 60; sporidiis 12-14 × 6.

Hab. in foliis Bambusaceae, Chari: Gribingui, Congo gallico. — Var. **Beckerae polystachiae** Bacc., F. Etiop. II n. 84, in Pirotta, Ann. Bot. 1917. — Stromatibus ellipticis ad 0,5 mm. longis, amphigenis, solitariis rarius gregariis ac confluentibus, monolocularibus, vel paucilocularibus, loculis 315 μ latis 180-200 μ altis; totius folii latitudinem occupantibus ob ostiolo prominulo papillatis; ascis paraphysatis (80-96 × 8-9,5); paraphysibus fere duplo longioribus, guttulatis obvallatis; sporidiis ellipticis oblique monostichis (9-11 × 6-7).

Hab. in Beckera polystachia Fr. (Graminaceae), Gondar, Etiopia, Africa.

44. **Phyllachora Blepharoneuri** Ch. E. Fairman, Mycologia 10., 1918, p. 5189
251. — Stromatibus foliicolis utrinque visibilibus elongatis curvulis 1-3 mm. long. 1 mm. latis nervos elevantibus; loculis 2-10 v. ultra in quoque stromate, epistromate persistenti intus limitatis; ascis et paraphysibus illis *Ph. graminis* conformibus; sporidiis monostichis, ellipsoideis eguttulatis, hyalinis, 10 × 6-7.

Hab. in foliis Blepharoneuri tricholepidis (Graminaceae), Ute Park Colfax C., 2200-2900 m. alt., New Mexico, Amer. bor. (P. C. Standley).

45. **Phyllachora Centothecae** Sydow, Ann. Mycol. XIII, 1915, p. 39; 5190
Theiss. et Syd., l. c. 13., 1915, p. 446. — Stromatibus amphigenis, plerumque in greges plus minus elongatos (3-15 mm. longos) seriatim dispositis, exiguis, rotundatis usque ellipticis, punctiformibus, $^1/_5$-$^1/_3$ mm. longis, nitidulis, convexis, 1-loculigeris; loculis globulosis vel applanato-globosis, 130-200 μ diam., clypeo bilaterali 25-45 μ crasso opaco aterrimo; ascis cylindraceis, breviter stipi-

tatis, copiose paraphysatis, octosporis, 50-60 × 9-11 ; sporis ovatis, continuis, hyalinis, oblique monostichis usque distichis, utrinque rotundatis, 11-13 × 5-7.

Hab. in foliis Centothecae lappaceae (Graminaceae), Moulmein, Burma, Indiae (E. J. Butler).

46. **Phyllachora Dimeriae** Theiss. et Syd., Ann. Mycol. 13., 1915, p. 447.— 5191
Stromatibus amphigenis, sparsis, oblongis v. breviter striaeformibus 0,5-1,5 mm. long. 0,5 mm. latis, nitide nigris, prominulis non confluentibus; clypeo uno latere v. utrinque evoluto, epidermoideo, opaco, 20-30 μ cr.; loculis plerumque parvis, 140-190 μ diam., rotundatis; ascis cylindraceis copiose paraphysatis, octosporis, 50-60 × 11-14; sporidiis plerumque monostichis, ovoideis v. oblongo-ellipsoideis, utrinque rotundatis, unilocularibus, hyalinis, 10-14 × 7-8.

Hab. in foliis Dimeriae stipaeformis (Graminaceae), Mt. Konomine prov. Tosa, Japonia (T. Joshinaga).

47. **Phyllachora atronitens** Rehm, Ascomyc. Philipp. V, Leaflets of Phi- 5192
lipp. Botany VI (1914) p. 2221. — Stromatibus gregariis, innatis, discoideis vel oblongatis, corticem atronitentem elevantibus et longitudinaliter disrumpentibus, 1-3 mm. longis et latis, nigris, ostiolis minimis conspicuis; ascis fusiformibus, octosporis, aparaphysatis, 45-48 × 9; sporidiis distichis, fusiformibus, rectis, continuis, guttatis, hyalinis, 12 × 3-3,5.

Hab. in Donace cannaefolio emortuo (Graminaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (M. B. Raimundo). — Sec. Theiss. et Syd., Ann. Mycol. 13., 1915, p. 564, probabiliter eadem est ac *Phyll. atrofigurans* Rehm (cnfr. n. 48), et e Phyllachoraceis removenda. Ad Clypeosphaeriaceas ?

48. **Phyllachora atrofigurans** Rehm, Ascom. Philipp. I, in Philipp. Journ. 5193
of Sci. VIII (1813) p. 183. — Stromatibus epidermidi innatis, nigris, planis, 0,3-1 mm. diam., orbicularibus, solitariis, dein in maculis ellipticis vel orbicularibus, figuratis, usque ad 1 cm. diam., longitudinaliter vel quadratim confluentibus; peritheciis innatis, globulosis, stroma minutissime papillulatum conoideo-subelvantibus, 120 μ diam.; ascis fusiformibus, sessilibus, 35 × 10, octosporis; sporidiis 2-3-stichis, oblongis vel clavatis, 1-cellularibus, hyalinis, 8-9 × 2,5-3.

Hab. in culmis Donacis cannaeformis (Graminaceae), atro-marmoratis, Luzon, prov. Laguna, Los Baños, ins. Philipp. (C. F. Baker). — Cnfr. *Ph. atronitens*, n. 47.

49. **Phyllachora donacina** Rehm, Ascomyc. Philipp. V, Leaflets of Phi- 5194

lipp. Botany, VI (1914) p. 2222. — Stromatibus laxe gregariis, innatis, ellipsoideis vel orbicularibus, convexulis, atris, plerumque parallele seriatis, 1-3 mm. longis, 1 mm. latis, intus nigris, denique longitudinaliter apertis; loculis circ. 8, monostichis, arcte confertis, globulosis, 120 μ circ. latis; ascis clavatis, aparaphysatis, 40-50 × 6; sporidiis distichis, fusoideis, rectis, utrinque acutatis, continuis, hyalinis, 15-18 × 2,5-3.

Hab. in culmo Donacis cannaeformis (Graminaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (S. A. Reyes). — Species ulterius inquirenda, sec. Th. et Syd., Ann. Mycol. 13., 1915, p. 448.

50. **Phyllachora Eriochloae** Speg., Syll. XXII p. 423 — var. **columbiensis** 5195
Theiss. et Syd., Ann. Mycol. 13., 1915, p. 448. — Stromatibus elongato-ellipsoideis, usque 0,8 × 0,28-0,32 mm., plerumque parvis et seriatim confluentibus, utrinque visibilibus; clypeo in utrinque epidermide; loculis e globosis depressis, 240-280 μ latis 100-140 μ altis, parietibus tenuibus praeditis; ascis cylindraceis, paraphysatis, p. sp. 70-80 × 9; sporidiis plerumque monostichis, elongato-angustatis, 13-14 × 4-5, v. quandoque 11 × 5,5.

Hab. in foliis Eriochloae punctatae (Graminaceae), Medellin Columbia, Amer. austr. (E. Mayor).

51. **Phyllachora Imperatae** Syd., Ann. Mycol. 15., 1917, p. 226. — Stro- 5196
mata in utraque foliorum pagina visibilia, sparsa vel gregaria, minuta, oblonga, 1-2 mm. longa; loculi 5-10 in quoque stromate, applanati, 300-350 μ lati, 80-100 μ alti, clypeo amphigeno 20-30 μ crasso; asci cylindracei, 70-80 × 12-14, octospori, paraphysati; sporae oblique monostichae vel distichae, anguste ellipsoideae vel oblongo-ellipsoideae, continuae, hyalinae, 12-17 × 5-6.

Hab. in foliis Imperatae cylindricae (Graminaceae), Benguet, Luzon, Ins. Philipp. (E. D. Merrill) et Imperatae spec., Los Baños (C. F. Baker).

52. **Phyllachora exigua** Theiss. et Syd., Ann. Mycol. 13., 1915, p. 449. — 5197
Stromatibus amphigenis, sparsis, minutis, punctiformibus 200-350 μ diam., rotundatis, parum nitidis prominentibusque, 1-v. 2-3-locularibus; clypeo epidermoideo in utraque parte evoluto, 18-24 μ cr., opaco; loculis rotundatis, 140-170 μ diam. parietibus brunneis 10-14 μ cr. praeditis; ascis cylindraceis, copiose paraphysatis, octosporis, pedicellatis, p. sp. 45-58 × 10-12; sporidiis monostichis, ovoideis v. ellipsoideis, utrinque obtusis, unilocularibus, hyalinis, 8-11 × 6-8.

Hab. in foliis Isachnes australis (Graminaceae), Akatsuchi-toge prov. Tosa, Japonia (T. JOSHINAGA).

53. **Phyllachora Tehonis** Trott., nom. n.— Syn. *Phyllachora Ischaemi* L.R. Tehon, Bot. Gazette 67., 1919, p. 507, tab. XVIII fig. 2-3, nec Syd.— Stromatibus epiphyllis rotundatis confertis saepe confluentibus mesophyllo innatis, 0,75-1,25 mm. diam.; clypeo 24-26 μ cr.; loculis duobus v. plurimis in quoque stromate, e sphaeroideis ampullaceis, 125-145 μ diam.; ascis e cylindraceis clavatis 105-150 × 10-12, octosporis; sporidiis hyalinis sphaeroideis monostichis 8 μ diam., uniguttulatis; paraphysibus filiformibus. 51

Hab. in foliis Ischaemi latifolii (Graminaceae), St. Pierre Martinica, Porto Rico.

54. **Phyllachora Ischaemi** Sydow, Ann. Mycol. 13., 1915, p. 40 et p. 449. — Stromatibus amphigenis, sparsis vel saepissime seriatim dispositis, minutis, punctiformibus, ellipticis, $^1/_3$-$^1/_2$ mm. longis, confluendo 1 mm. longis, convexis, nitidulis, 1-loculigeris, confluendo pauciloculigeris; loculis folium subpenetrantibus, applanato-globosis, 180-220 μ diam., clypeo bilaterali vel unilaterali, opaco, 20-30 μ crasso; ascis cylindraceo-clavatis, copiose paraphysatis, breviter stipitatis, octosporis, 45-60 × 12-18; sporidiis irregulariter distichis vel etiam conglobatis, ovato-ellipsoideis, utrinque obtusis, continuis, hyalinis, 12-15 × 5-6,5. 51

Hab. in foliis Ischaemi laxi (Graminaceae), Bilin, Burma, Indiae (E. J. BUTLER).

55. **Phyllachora Miscanthi** Syd., Ann. Mycol. 15., 1917, p. 227. — Stromata in utraque foliorum pagina visibilia, sparsa, elliptica, 1,5-3 mm. longa, nitidula plurilocularia, clypeo amphigeno, firmo, aterrimo, 30-35 μ crasso, ex byphis brunneolis 3-3,5 μ latis contexta; loculi 170-300 μ lati; asci cylindraceo-clavati, stipitati, paraphysati, 160-180 × 18-22, octospori; sporae monostichae, late ellipsoideae, continuae, rotundatae, hyalinae, 18-24 × 12-14. 52

Hab. in foliis Miscanthi sinensis (Graminaceae), Benguet, Luzon, Ins. Philipp. (E. D. MERRILL).

56. **Phyllachora vulgata** Theiss. et Syd., Ann. Mycol. 13., Barthol. Fungi Columb. n. 2249, 1915 p. 450. — Stromatibus totam crassitudinem folii occupantibus, elongatis, 1-2 mm. long. 0,5-1 mm. latis, crebre sparsis v. seriatis, non vel vix confluentibus, prominentibus, opace nigris, loculis 1-3 seriatis praeditis; clypeo utrinque fortiter evoluto, 20-40 μ cr., compacto, nigro; loculis confertis, totam crassitudinem stromatis occupantibus prominentibusque, globosis, 160- 53

220 μ latis 150-190 μ altis, parietibus lateralibus bene evolutis, 10-12 μ cr., brunneis; ascis cylindraceis, breviter pedicellatis, copiose paraphysatis, 60-75 × 8-10, octosporis; sporidiis monostichis, ellipsoideis, hyalinis, unilocularibus, 9-11 × 4,5-5,5.

Hab. in foliis Muehlenbergiae silvaticae, racemosae, diffusae, foliosae, soboliferae (Graminaceae), in America bor. frequens. — *Ph. graminis* proxima sed stromatibus minutis praecipue diversa.

57. **Phyllachora Ophiuri** Syd., Ann. Mycol., 15., 1917, p. 227.— Stro- 5202
mata amphigena, plerumque hypophylla seriatim disposita, elliptica vel oblonga 0,5-1 mm. longa, confluendo 2 mm. longa, convexa, nitidula, plurilocularia, clypeo epidermali firmo, aterrimo, opaco, 25-30 μ crasso; loculi 250-500 μ lati, 150-300 μ alti, parietibus lateralibus brunneolis 10-12 μ crassis ex hyphis tenuissimis compositis; hyphae mycelii totam folii crassitudinem occupantes, flavidobrunneolae, 2,5-3,5 μ cr.; asci clavati copiose paraphysati, 80-90 × 15-18, octospori; sporae oblique monostichae usque subdistichae, ovatae vel ellipsoideae, utrinque rotundatae, continuae, hyalinae, 12-13 × 9-10.

Hab. in foliis Ophiuri corymbosi (Graminaceae), prov. Rizal, Ins. Philipp. (M. Ramos).

58. **Phyllachora Oryzopsidis** Theiss. et Syd., Ann. Mycol. 13., 1915, 5203
p. 451 Barthol., Fungi Columb. 3536; Rehm, Ascom. 1916 (sub *Ph. graminis*). — Stromatibus epiphyllis, in hypophyllo non v. vix visibilibus, sparsis v. laxe seriatis, ex ellipsoideis breviter linearibus, $^1/_3$-1 mm. long. $^1/_3$ mm. latis, parum prominentibus, nigris, subopacis, non confluentibus; clypeo epidermoideo, 20-25 μ cr., nigrobrunneo, parum incrassato, limitato, clypeo basilari non v. vix evoluto; loculis 1-2 seriatis e depresse globosis lenticularibus, 150-230 μ latis 90-140 μ altis, parietibus lateralibus tenuibus, brunneolis, 8-10 μ cr.; ascis cylindraceis, 70-95 × 9-10, paraphysatis, breviter pedicellatis, octosporis; sporidiis monostichis, ex ellipsoideis oblongis, utrinque obtusis rotundatis, unilocularibus, hyalinis, 11-14 × 5-6,5.

Hab. in foliis Oryzopsidis asperifoliae (Graminaceae), London Ontario, Canada, Amer. bor. (Dearness).—A *Ph. graminis* fabrica stromatis loculorum diversa.

59. **Phyllachora congruens** Rehm, Ascomyc. Philipp. V, Leaflets of Phi- 5204
lipp. Botany, VI (1914) p. 2220. — Stromatibus foliis late flavidule decoloratis innatis, sparsis, in utraque folii pagina conspicuis, atris, irregulariter discoideis, interdum striatulis 100-200 μ diam., loculos

1-3 vix ostiolatos includentibus; ascis clavatis, rarissime cylindraceis, 40-50 × 10-12, paraphysibus filiformibus obvallatis; sporidiis distichis, subclavatis, utrinque rotundatis, continuis, hyalinis, eguttulatis, 12 × 4-5.

Hab. in foliis Panici carinati (Graminaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (M. B. Raimundo). — Sec. Theiss. et Sydow, Ann. Myc. 13., 1915, p. 451; ascis 45-65 × 10-14, paraphysibus apice saepe clavulatis, sporidiis distichis, 11-13 × 4-5.

60. **Phyllachora Raciborskii** Theiss. et Syd., Ann. Mycol. 13., 1915, 520
p. 453. — Stromatibus amphigenis, plus minus aequaliter sparsis v. hinc inde paucis approximatis v. etiam cencentrice dispositis, parvis, ovoideis, 0,2-0,4 mm. long. non v. raro confluentibus, prominulis, uni-v. 2-3 locularibus; clypeo in utroque latere parum evoluto, 20 μ circ. crasso; loculis depressis, 60-120 μ altis et usque ad 220 μ latis totam crassitudinem foliorum occupantibus; ascis cylindraceis, octosporis, copiose paraphysatis, 65-80 × 13-15; sporidiis plerumque distichis, ellipsoideo-fusoideis, utrinque angustatis sed obtuse rotundatis, unilocularibus, hyalinis, 14-18 × 6-7,5.

Hab. in foliis Panici nepalensis (Graminaceae), Salak, Java.

61. **Phyllachora Vanderystii** Theiss. et Syd., Ann. Mycol. 13., 1915, 52
p. 455.— Stromatibus densiuscule sparsis, utrinque visibilibus, saepius longitudinaliter seriatis, ellipticis, nigris, subnitentibus, usque 1 mm. longis, convexulis; clypeo epidermali in utraque folii pagina 25-30 μ cr., opacis, hyphis stromaticis in mesophyllo parcis; loculis approximatis, altitudine folii, applanato-ellipsoideis, 500 μ long. 250-300 μ latis 160-200 μ altis, membrana brunnea (hyphis e stromate clypeali oriundis concentrice circumpositis) 8-10 μ crassis; ascis cylindraceis, paraphysatis, breviter pedicellatis, 65-75 × 12-16; sporidiis 1-2-stichis, ellipsoideis v. oblongis, hyalinis, continuis, 13-15 × 5,5-6,5.

Hab. in foliis Panici plicati (Graminaceae), Nyango-Tal, Congo, Africa (H. Vanderyst).

62. **Phyllachora sanguinolenta** Theiss. et Syd., Ann. Mycol. 13., 1915, 52
p. 455. — Stromatibus amphigenis arcte gregariis, rotundatis v. ellipsoideis, $^1/_3$-$^3/_4$ mm. prominenter convexis, nitidulis, raro confluentibus, in maculis indistinctis insidentibus; clypeo epidermali 20 μ cr., amphigeno v. unilaterali; loculis ellipsoideis v. rotundatis et 240 μ diam., parietibus tenuibus brunneis; ascis cylindraceis, paraphysatis, breviter pedicellatis, 60-70 × 10-14, sporidiis monosti-

chis, quandoque distichis, ellipsoideis, rotundatis, hyalinis, unilocularibus, 13,5 × 7-8.

Hab. in foliis Panici sanguinolenti (Graminaceae), Nyangotal, Congo (H. VANDERYST). — Var. **microspora** Theiss. et Syd. l. c., stromatibus sparsis convexis, nitidulis, ellipsoideis, rotundatis, 0,5-1 mm. long., sporidiis ellipsoideis, 8 × 5. — *Hab.* in Graminacea ignota, Nyango, Congo (H. VANDERYST).

63. **Phyllachora Panici-sulcati** (P. Henn.) Theiss. et Syd., Ann. Mycol. 13., 1915 p. 453, *Phyll. graminis* (Pers.) Fuck. var. *Panici-sulcati* P. Henn., Hedwigia 41., 1902, p. (103). — *Phyll. seriatae* proxima, a qua differt stromatibus parum majoribus oblongis v. ellipsoideis 1-1,5 mm. longis; sporidiis plerumque latioribus obtusis, 10-15 × 7-9. 5208

Hab. in foliis Panici sulcati (Graminaceae), Costa Rica.

64. **Phyllachora seriata** Theiss. et Syd., Ann. Mycol. 13., 1915, p. 453. — Stromatibus secus nervos in maculis flavescentibus plus minus distincte seriatis, in utraque pagina foliorum visibilibus, parvis, non vel vix confluentibus, ellipsoideis v. oblongis, usque $^1/_2$ mm. long., nitide nigris, plerumque unilocularibus; clypeo in utroque latere evoluto, loculos parum crassiore, 15-20 μ cr.; loculis 150-180 μ altis 200-280 μ latis, totum folium amplectentibus; ascis copiose paraphysatis, cylindraceo-clavatis, pedicellatis, 60-80 × 10-14, octosporis; sporidiis monostichis v. distichis, ellipsoideo-fusoideis, utrinque angustatis, apice obtusis, unilocularibus, hyalinis, 13-15 × 5,5-6,5. 5209

Hab. in foliis Panici sp. (Graminaceae), Dumaguete prov. Negros, Ins. Philippin. (ELMER).

65. **Phyllachora quadrospora** L. R. Tehon, Bot. Gazette 67., 1919, p. 507, tab. XVIII fig. 4. — Stromate variabili plerumque e ovoideo lineari, 0,5-1 × 0,5 mm., clypeo epidermali amphigeno plerumque biloculari; loculis subsphaeroideis, 115-125 μ diam.; ascis cylindraceis breviter stipitatis, 100-110 × 10-12, 4-sporis, paraphysatis; sporidiis hyalinis, granulosis, 2-guttulatis, ellipsoideis, 20-22 × 8. 5210

Hab. in foliis Paspali glabri (Graminaceae), Maricao, P. conjugati, Tanama River, Porto Rico.

66. **Phyllachora Winkleri** P. et H. Syd., Ann. Mycol. X, 1912, p. 80. — Theiss. et Syd., Ann. Myc. 13., 1915, p. 456. — Stromatibus innatis, utrinque prominulis, epidermide nigrefacta adnata tectis, aterrimis, ellipticis usque oblongis, saepe confluentibus, 1-3 mm. diam., ob loculos numerosos plus minusve prominulos rugulosis; ascis cylindraceis, octosporis, breviter pedicellatis, 80-120 × 11-16; sporidiis monostichis, globosis, subglobosis v. late ellipsoideis, continuis, 5211

hyalinis, 11-17 × 9-13; paraphysibus numerosis, filiformibus, ascos superantibus; loculis junioribus, spermatiis filiformibus, varie curvis, 15-20 × 1, hyalinis instructis.

Hab. in foliis Paspali scrobiculati (Graminaceae), Muanza Lac, Victoria, Africa or. (B. Schröder et H. Winkler). — A *Ph. graminis* sporis majoribus plerumque globosis diversa.

67. **Phyllachora paspalicola** P. Henn., Hedw. vol. 48 (1908) p. 106.— 5212
Rehm, Ascom. 1785; Theiss. et Syd., Ann. Myc. 13., 1915, p. 456.— Maculis effusis, fuscidulis; stromatibus amphididymis, sparsis, rotundato-pulvinatis, minutis, atris, ca. 300 μ diam.; peritheciis immersis, globulosis; ascis cylindraceo-subclavatis, obtusis, octosporis, paraphysatis, 70-90 × 8-10; sporidiis monostichis, ellipsoideis, utrinque rotundatis, hyalinis, 6-8 × 4,5-6.

Hab. in foliis Paspali sp. (Graminaceae), hort. botan. Goeldi, Parà, Brasilia (Baker). — A *Ph. graminis* Fuck. etc. diversa.

68. **Phyllachora Penniseti** Sydow, Ann. Mycol. XIII, 1915, p. 39. — 5213
Theiss. et Syd., Ann. Myc. 13., 1915, p. 457. — Stromatibus in utraque foliorum pagina conspicuis, sparsis vel aggregatis et seriatim dispositis, rotundatis vel oblongis, 0,5-1 mm. longis, subinde confluendo majoribus, opace atris, intus pluriloculariibus, loculis irregularibus majusculis, 280-350 μ longis, 200-300 μ altis, clypeo bilaterali 15-25 μ crasso, parietibus lateralibus 8-10 μ latis brunneolis; stylosporis rectis vel flexuosis, continuis, filiformibus, hyalinis, 18-35 × 1; ascis clavatis, ad apicem rotundatis, 70-95 × 20-26, paraphysatis, 8-sporis; sporidiis distichis, late ellipsoideis, utrinque late rotundatis, continuis, hyalinis, intus guttulatis, 17-24 × 11-18.

Hab. in foliis Penniseti Benthami Steud. (Graminaceae), Lazaret St. Jean, Congo belgica (H. Vanderyst).

69. **Phyllachora Bromi** Fuck. — Syll. II, 608 — fm. **Poae-nemoralis** Gz. 5214
Frag. in Trabajos Mus. Nac. Ciencias Nat., ser. Botan., n. 7 (1914) p. 32. — Stromatibus oblongis vel irregularibus 1-2 × 0,5-1 mm.; loculis paucis; ascis 90-100 × 11-12, paraphysatis, octosporis; sporidiis ellipsoideis, oblique vel irregulariter monostichis, hyalinis, 10-12 × 5,5-5, guttulis 2-3 praeditis.

Hab. in foliis Poae nemoralis var. vulgaris (Graminaceae), prope Cercedilla in montibus Guadarramae, Hispania.

70. **Phyllachora Pogonatheri** Sydow., Ann. Mycol. XIII, 1915, p. 40.— 5215
Theiss. et Syd., Ann. Myc. 13., 1915, p. 458. — Stromatibus amphigenis, solitariis, haud seriatis, minutis, rotundatis, punctiformibus, 0,25-0,5 mm. diam., vix nitentibus, 1-3-loculigeris, planiuscu-

lis; loculis matricem fere penetrantibus, applanatis, 200-300 μ longis 170-220 μ altis, clypeo bilaterali, opaco, atro, 20-35 μ crasso, membrana laterali multo tenuiore ca. 10 μ crassa brunneola; ascis cylindraceis, breviter stipitatis, octosporis, paraphysatis, 60-80 × 10-14; sporis plerumque 1-stichis vel oblique 1-stichis, subinde distichis, ellipsoideis, utrinque obtusis, continuis, hyalinis, 12 × 5-6.

Hab. in foliis Pogonatheri saccharoidei (Graminaceae), Kumaon Himalaya, Indiae (Inayat com. E. J. Butler).

71. **Phyllachora leptotheca** Theiss. et Syd., Ann. Mycol. 13., 1915, p. 458. — Stromatibus amphigenis folium decoloratum perforantibus, plerumque aeque distributis, parvis, rotundatis, $^1/_3$-$^3/_4$ mm. diam., utrinque prominulis, nitidulis, paucilocularibus; clypeo in utraque folii pagina, epidermali, opaco, 20-30 μ cr.; loculis rotundatis, 130-150 μ diam., parietibus brunneis 10-12 μ cr.; ascis cylindraceis, pedicellatis, copiose paraphysatis, 55-70 × 4,5-6, octosporis; sporidiis monostichis, ellipsoideis, plerumque utrinque acutiusculis, unilocularibus, hyalinis, 8-10 × 4-4,5. 5216

Hab. in foliis Polliniae imberbis (Graminaceae), Tochimura, Tosa, Japonia (T. Joshinaga).

72. **Phyllachora Polypogonis** Theiss. et Syd., Ann. Mycol. 13., 1915, p. 458. — Stromatibus amphigenis, oblongis v. breviter linearibus, $^1/_3$-1 mm. long. confluendo usque 2 mm. long., parvis $^1/_3$-1 mm. latis, opacis, sparsis v. ordinate distributis, paucilocularibus; clypeo amphigeno epidermoidali, opaco, 20-30 μ cr; loculis depresse rotundatis, totam crassitudinem folii occupantibus, 170-250 μ latis, 140-180 μ altis parietibus brunneis 10 μ cr.; ascis cylindraceis, breviter pedicellatis, copiose paraphysatis, octosporis, 55-70 × 9-12; sporidiis monostichis, ovoideis, rotundatis, unilocularibus, hyalinis, 9-11 × 6,5-8. 5217

Hab. in foliis Polypogonis criniti (Graminaceae), Concepcion, Chile (F. W. Neger).

73. **Phyllachora Rottboelliae** Syd. et Butl., Ann. Mycol. IX, 1911, p. 400. — Theiss. et Syd,. Ann. Mycol. 13., 1915, p. 458. — Stromatibus innatis, amphigenis, oblongis v. linearibus, saepe confluentibus, usque $^1/_2$-1 cm. longis, atris; loculis pluribus, prominulis, majusculis; ascis cylindraceis, copiose paraphysatis, 65-80 × 10-14, octosporis; sporidiis ellipsoideis, recte v. oblique monostichis, utrinque rotundatis, hyalinis, continuis, plasmate saepe bipartito, 11-17 × 6,5-8. 5218

Hab. in foliis Rottboelliae exaltatae (Graminaceae),

The Droog Nilgiri Hills, Indiae or. (E. J. BUTLER), et Luzon, Ins. Philipp. — A *Ph. graminis* differt praecipue stromatibus sporidiisque majoribus.

74. **Phyllachora Sacchari-spontanei** Syd., Enum. Philipp. Fungi I, in Philipp. Journ. of Sci. VIII (1913) p. 279. — Theiss. et Syd., Ann. Mycol. 13., 1915, p. 459. — Stromatibus amphigenis, in utraque foliorum pagina conspicuis, maculis flavido-pallescentibus saepe rufo-vel sanguineo-marginatis insidentibus, saepe etiam sine maculis, sparsis vel paucis laxe seriatim dispositis, oblongis, 0,5-1,75 mm. longis, 330-750 μ latis, carbonaceis, subopacis; loculis seriatim dispositis, minutis; ascis clavatis, subsessilibus vel breviter stipitatis, 75-100 × 18-22, filiformi-paraphysatis; sporidiis distichis, fusiformibus, utrinque leniter attenuatis, continuis, hyalinis, intus minute guttulatis, 22-27 × 7,5-8,5; stylosporis simul praesentibus, breviter filiformibus, rectis vel leniter curvulis, hyalinis, 16-22 × 0,75-1. 52

Hab. in foliis Sacchari spontanei (Graminaceae), Luzon, prope Manila, ins. Philipp. — Cum *Ph. Sacchari* P. Henn. in Saccharo officinarum saepe confusa, sed ab ea sporidiis alienis semper dignoscenda.

75. **Phyllachora Evansii** P. et H. Syd., Ann. Mycol. X, 1912, p. 40.— Theiss. et Syd., Ann. Mycol. 13., 1915, p. 459. — Stromatibus amphigenis, sparsis v. seriatim dispositis, oblongis, 0,5-1 mm. long., $^1/_3$-$^1/_2$ mm. latis, atris glabris, haud nitentibus, intus pauciloculariboris, loculis irregularibus; ascis cylindraceis v. cylindraceo-clavatis, apice rotundatis, octosporis, 70-120 × 7-12; paraphysibus filiformibus, numerosissimis; sporidiis monostichis usque subdistichis, ellipsoideis usque oblongis, plerumque utrinque rotundatis, subinde etiam basi leniter productis, rectis, hyalinis, 14-18 × 6 8, contentu spurie granulato-striato; pycnidiosporis simul praesentibus varie curvis saepe falcatis, hyalinis, 15-25 × 1. 52

Hab. in foliis Setariae sulcatae (Graminaceae), Barberton, Transvaal (J. BURTT DAVY). *Phyll. setariaecola* Speg. videtur diversa.

76. **Phyllachora Engelhardtiae** Rac. in Theiss. et Syd. Ann. Mycol. 13., 1915, p. 469. — Stromatibus rotundatis opacis usque 1 mm. latis, solitariis v. paucis aggregatis in maculis flavescentibus 0,5-1 cm. latis insidentibus et folium crassum hypertroficum plus minus efficientibus; loculis perithecialibus 1-5 depresse lenticularibus, quandoque fortiter prominentibus; parietibus stromati subconformibus; ostiolo hypophyllo, breviter papilliformi, flavidulo, demum colla- 52

bescenti ; peritheciis 150-200 μ altis, 170-590 μ latis ; ascis brevissimis, cylindraceo-clavatis, apice late rotundatis, singulis ovoideis latioribus 36-42 × 15-20, octosporis ; sporidiis unilocularibus, hyalinis, levibus, elongato-ovoideis, 12 14 × 4-5.

Hab. in foliis Engelhardtiae sp. (Juglandaceae), Salak, Java (Raciborski).

77. **Phyllachora cantonensis** Sydow, Ann. Mycol. 17., 1919, p. 141.— 5222
Maculae utrinque visibiles, usque 1 cm. latae, flavae vel ochraceo-flavae, indeterminatae ; stromata pluria (3-10) in quaque macula irregulariter aggregata, in utraque foliorum pagina visibilia, 0,5-1 mm. diam., 1-pauci-locularia ; loculi totam folii crassitudinem occupantes, 500-700 μ lati, 350-500 μ alti, clypeo 25-40 μ crasso ; asci clavati, 65-85 × 10-16, octospori, copiose paraphysati ; sporae plerumque irregulariter monostichae, anguste ellipsoideae vel oblongae, continuae, hyalinae utrinque obtusae, 12-14 × 5-7.

Hab. in foliis Litseae glutinosae (Lauraceae), pr. Canton, Kwangtung, prov. Sinarum (A. O. Reinking).

78. **Phyllachora Nectandrae** F. L. Stevens et N. Dalby, Bot. Gazette 5223
68., 1919, p. 57, tab. fig. 23-24. — Maculis rotundatis v. irregularibus, brunneis, stromata circumdantibus, utrinque prominentibus ; stromatibus epiphyllis nigris, nitidis, 1-4 mm. diam. parum elevatis, sparsis v. raro confluentibus ; loculis singulis v. paucis, subrotundatis, in mesophyllo nidulantibus, 225-500 μ latis 300 μ altis, pariete infra tenui ; clypeo nigro 40-50 μ crasso, lateraliter expanso ; paraphysibus copiosis filiformibus ; ascis cylindraceis, octosporis, 108 × 10 ; sporidiis oblongis 14 × 5.

Hab. in foliis Nectandrae patentis (Lauraceae), Maricao, Porto Rico. — A *Ph. nectandricola* Speg. praecipue differt paraphysibus praesentibus.

79. **Phyllachora ocoteicola** F. L. Stevens et N. Dalby, Bot. Gazette 68., 5224
1919, p. 57, tab. fig. 25-26. — Maculis amphigenis, copiosis, angulosis, 2-4 mm. diam., supra nitide nigris infra pallidioribus, ob loculos rugulosis ; clypeo epidermali, utrinque visibilibus, depressis, circ. 17 μ cr. ; stromatibus in mesophyllo evolutis ; loculis copiosis, in mesophyllo nidulantibus, intus 156-170 μ altis 200-235 μ latis, parietibus hyalinis tenuibus ; ascis numerosis octosporis ; sporidiis e oblongis cylindraceis, 54 × 17, uno apice parum acutatis ; paraphysibus numerosis, filiformibus, curvulis.

Hab. in foliis Ocoteae leucoxylonis (Lauraceae), Mte. Alegrillo, Mte. de Oro, Maricao, Porto Rico. — A *Ph. Ocoteae* P.

Henn. caracteribus plurimis diversa.

80. **Phyllachora uberata** Sacc., Ann. Mycol. XI, 1913, p. 16. – Stromatibus laxe gregariis, hemisphaericis, protuberantibus, 1-1,5 mm. lat., piceis, nitidissimis, basi innatis, in pag. inferiore foliorum non visibilibus, superficie obtuse parce inaequaliter papillatis, contextu carbonaceo indistincte celluloso basi subdeficiente donatis, intus griseo-pallidis, 3-6-locellatis, loculis amplis cavis v. ob vetustatem bysso albo farctis, 300-400 μ diam.; ascis... jam absorptis. 5225

Hab. in foliis emortuis v. languidis P e r s e a e spec. (Lauraceae), in Mexico (Bonansea). — Etsi fructificatio ignota, species ob stromata majuscula, protuberantia, atro-nitida, loculosque valde amplos distingui meretur. — Sec. Theiss. et Sydow, Ann. Mycol. 13., 1915, p. 576 a *Phyllachora* removenda.

81. **Phyllachora phoebicola** Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires XXIII (1912) p. 91. — Stromatibus solitariis vel rarius 2-3 laxe gregariis, saepissime hypophyllis, semilenticularibus, parvis, nitidulis, areola angusta atra cinctis, 1-2 loculigeris; loculis e mutua pressione angulatis, quandoque confluentibus; ascis subcylindraceis, apice subtruncato-rotundatis, basi leniter cuneatis, crasse breviterque pedicellatis, 120-130 × 10-15, parce filiformi-paraphysatis; sporidiis oblique monostichis, ellipsoideis, utrinque acute rotundatis, non vel grosse 1-guttatis, hyalinis, 16-22 × 8-10. 5226

Hab. in foliis vivis P h o e b i s p o r p h y r i a e (Lauraceae), in silvis prope Calilegua, Argentina.

82. **Phyllachora disseminata** Syd., Ann. Mycol. 14., 1916, p. 82. — Stromatibus in utraque foliorum pagina visibilibus, per totam folii superficiem aequaliter sparsis, minutis, rotundatis 0,5-0,75 mm. diam., maculis minutis ochraceis parum visibilibus insidentibus, haud confluentibus, in epiphyllo planis, in hypophyllo leniter convexis, atris, opacis; clypeo amphigeno, epidermali, opaco, 20-30 μ crasso, leniter expanso; loculis plerumque singulis in quoque stromate, mesophyllum totum occupantibus, applanato-globosis vel sublenticularibus, 180-250 μ latis, 150-170 μ altis, pariete tenui brunneo; ascis cylindraceis, breviter stipitatis, paraphysatis, 60-80 × 10-14, octosporis; sporidiis recte vel oblique monostichis ellipsoideo-oblongis, utrinque plerumque obtusis, continuis, hyalinis, 12-14 × 6-7. 5227

Hab. in foliis L a u r a c e a e, Seringal S. Francisco, Rio Acre, Brasilia (E. Ule).

83. **Phyllachora nervicida** Spegaz., Rel. Mycol. trop. etc. in Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 128.— Stromata amphy- 5228

gena nervationibus tantum innata, 10-20 mm. long. 2-2,5 mm. diam., illas leniter tumefacientia, atra, levia, loculis periphaericis parvis constipatis astomis; ascis cylindraceis apice rotundatis crasseque tunicatis deorsum modice attenuato-pedicellatis, octosporis paraphysatis, 200 × 14; sporae recte monostichae elliptico-subcylindraceae, primo guttulatae hyalinae laeves serius 2-blastes dense minuteque papilloso-rugulosae, roseo-fumosae, 22-26 × 11-13. An melius *Phaeodothis* species?

Hab. ad folia viva Lauraceae cujusdam, prope Apiahy, Brasilia (J. Puiggari).

84. **Phyllachora uleana** (Rehm), *Physalospora perversa* Rehm var. *uleana* Rehm, Hedwigia 40., 1901, p. 113; Syll. XVI p. 460. — Syn. *Phyll. accedens* Theiss. et Syd., Ann. Mycol. 13., 1915, p. 478 nom. nov. 5229

85. **Phyllachora indica** Theiss. et Syd., Ann. Mycol. 13., 1915, p. 488. — Stromatibus amphigenis, opace nigris, depressis, rotundatis, 1-2,5 mm. latis, superficie subpulveraceis; loculis bistratosis, depresse globosis 300-350 μ latis 180-220 μ altis; ascis paraphysatis, clavatis, 80-90 × 16-20; sporidiis distichis, hyalinis, unilocularibus, elongato-ellipsoideis, utrinque obtuse rotundatis, 18-20 × 7-8, rectis v. subinaequilateris. 5230

Hab. in foliis Acaciae penninerviae (Leguminosae), Indiae.

86. **Phyllachora texana** Tharp, Mycologia IX, 1917, p. 118. — Stromatibus magnitudine variabilibus e minute punctiformibus usque 1 mm. diam. et ultra, circularibus, v. confluendo irregulariter lobatis, utrinque effusis; loculis ascigeris uno v. ultra in quoque perithecio, ostiolis unilateralibus v. amphigenis; ascis paraphysatis, clavatis, 50-80 × 10-14; sporidiis typice 8 in quoque asco, monostichis v. distichis, ovoideis utrinque subacutis, hyalinis, unilocularibus, 12-19 × 4-5,5. 5231

Hab. in foliis vivis Acaciae Wrightii, Cotulla, Texas, Amer. bor. (Tharp). — A *Ph. Acaciae* P. Henn. distincta.

87. **Phyllachora Afzeliae** Syd., Enum. Philipp. Fungi I, in Philipp. Journ. of Sci. VIII (1913) p. 277. — Stromatibus epiphyllis, sparsis, leniter prominulis, rotundatis, 0,5-2 mm. latis, nitidulis, atris, intus pluriloculatis, ob loculos prominulos leniter rugulosis; ascis clavatis, 50-60 × 11-14, octosporis; sporidiis fusiformibus, utrinque acutis, continuis, hyalinis, 18-24 × 4,5-5,5; stylosporis simul praesentibus filiformibus, varie curvis, continuis, hyalinis, tenuissimis, 17-25 × 0,75. 5232

Hab. in foliis vivis Afzeliae (Intsiae) bijugae, (Leguminosae), Mindanao, distr. Cotabato, ins. Philipp.

88. **Phyllachora Apuleiae** Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires, XXIII (1912) p. 90. — Stromatibus repando-discoideis, 1-3 mm. latis, innatis, atris, levibus, opacis, quandoque simplicibus integris, quandoque compositis, altero centrale fertile majore, caeteris minoribus subcircinantibus, sterilibus cincto, vix prominulis; loculis paucis centralibus, saepe confluentibus, lenticularibus, 120-150 μ diam., astomis; ascis subfusoideis, apice obtuse rotundatis, basi breviter crasseque pedicellatis, 70 × 18, pseudoparaphysibus crassis subcoalescentibus obvallatis, octosporis; sporidiis recte distichis vel oblique monostichis, ellipsoideis, utrinque subacutiuscule rotundatis, grosse 1-guttatis, hyalinis, 14 × 7-8. 5233

Hab. in foliis vivis Apuleiae praecocis (Leguminosae), in silvis prope Puerto Leòn, Misiones, Argentina.

89. **Phyllachora erebia** Syd. in Syd. et Butl., Ann., Mycol. IX, 1911, p. 396, Theiss. et Syd., Ann. Mycol. 13., 1915, p. 493. — Stromatibus amphigenis, sed plerumque epiphyllis, dense confertis confluentibusque, plus minus late effusis et crustaceis, saepe magnam folii partem occupantibus, aterrimis, loculis minutis omnino immersis; ascis cylindraceis, 50-70 × 8-15, octosporis; sporidiis subglobosis, ovatis v. late ellipsoideis, hyalinis, continuis, 9-12 × 6-9. 5234

Hab. in foliis Caraganae sp. (Leguminosae), Harwan, Kashmir, Indiae or. (E. J. Butler).

90. **Phyllachora canafistulae** F. L. Stevens et N. Dalby, Bot. Gazette 68., 1919, p. 55, tab. fig. 5-6. — Maculis stromata non excedentibus; stromatibus latis, 2-5 mm., depressis, nigris, utrinque visibilibus, in mesophyllo evolutis, plurilocularibus; clypeo supra magis prominenti; loculis rotundatis, 155-170 μ diam.; ascis cylindraceis 72-99 × 16-20; sporidiis e ovoideis ellipsoideis, hyalinis, continuis, 13-16 × 6-8; paraphysibus filamentosis. 5235

Hab. in foliis Cassiae fistulae (Leguminosae), Mayaguez, Porto Rico. — A *Phyll. bakeriana* et *Phyll. Cassiae* omnino diversa.

91. **Phyllachora dolichogena** (B. et Br.) Sacc., Syll. II p. 601. — var. **Samoensis** Theiss. et Syd., Ann. Mycol. 13., 1915, p. 500. — V. Höhnel, Fragm. z. Mykol. n. 129. — A typo recedit stromatibus punctiformis et loculis magis confertis; ascis cylindraceo-clavatis, breviter pedicellatis, 62-80 × 12-16, paraphysatis; sporidiis monostichis v. distichis, hyalinis, unilocularibus, ovoideis, 12-13 × 8-9. 5236

Hab. in foliis Dolichos sp. (Leguminosae), Upolu, Samoa (Rechinger).

92. **Phyllachora bakeriana** P. Henn., Hedw. vol. 48 (1908) p. 106; Rehm, Ascomyc. n. 1788; Theiss. et Syd., Ann. Mycol. 13., 1915, p. 494.— Maculis flavo-fuscidulis, indeterminatis; stromatibus epiphyllis, gregariis, rotundato-pulvinatis, planis, atris, punctoideo-ostiolatis, 0,6-1 mm. diam; peritheciis immersis, rufo-brunneis, globulosis; ascis subclavatis vel fusoideis, vertice applanatis vel obtusis, octosporis, paraphysatis, 60-80 × 8-12; sporidiis subdistichis, oblonge fusoideis, utrinque acutis vel rotundatis, subcurvulis, hyalinis, 14-24 × 4-5. 5237

Hab. in foliis Cassiae Hoffmanseggianae (Leguminosae), hort. bot. Goeldi, Parà (C. F. Baker). — A *Ph. Cassiae* P. Henn. omnino distincta.

93. **Phyllachora Cratyliae** Syd., Ann. Mycol. 14., 1916, p. 83. — Stromatibus epiphyllis, sine maculis, sparsis, minutis, ca. 1 mm. diam., non confluentibus, plerumque fere orbicularibus, lenissime convexis nitidulis, plurilocularibus, in hypophyllo parum manifestis; clypeo epidermali, epiphyllo ca. 25-30 μ crasso, saepe etiam hypophyllo sed minus evoluto; loculis subglobosis, 150-220 μ diam., in mesophyllo sitis, epidermidem hypophyllam attingentibus v. fere attingentibus, pariete 12-14 μ lato brunneo; ascis cylindraceo-clavatis, non vel brevissime stipitatis, 55-70 × 12-14, octosporis, copiosissime paraphysatis; sporidiis oblique monostichis vel distichis, anguste clavatis, superne rotundatis, inferne plerumque attenuatis, continuis, hyalinis 23-26 × 5. 5238

Hab. in foliis Cratyliae floribundae (Leguminosae), Seringal Auristella, Rio Acre, Peruvia (E. Ule).

94. **Phyllachora dalbergiicola** P. Henn.— Syll. XVI p. 619.— fm. **Leguminum** Rehm, Ascomyc. Philipp. V, Leaflets of Philipp. Botany, VI (1914) p. 2219. 5239

Hab. in leguminibus Dalbergiae ferrugineae (Leguminosae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (S. A. Reyes).

95. **Phyllachora lactea** Theiss. et Syd., Ann. Mycol. 13., 1915 p. 497.— Ita vocanda *Auerswaldia Dalbergiae* P. Henn. 5240

Hab. in foliis Dalbergiae lacteae (Leguminosae), Kilimandscharo, Africae trop.

96. **Phyllachora affinis** Theiss. et Syd., Ann. Mycol. 13., 1915, p. 498.— Ita vocanda est *Phyll. yapensis* (P. Henn.) Syd. var. *rhytismoides* Rehm, quia jam extat *Phyll. rhytismoides* (Corda) Sacc. 5241

Hab. in foliis Derridis philippinensis (Leguminosae),

Los Baños Luzon, Ins. Philippin.

97. **Phyllachora spissa** Syd. et Syd. et Butl., Ann. Mycol. IX, 1911, 524
p. 397. — Theiss. et Syd., Ann. Mycol. 13., 1915, p. 497. — Maculis irregularibus, usque 1 cm. diam., brunneolis; stromatibus amphigenis, innatis, in maculis dense aggregatis, minutissimis, punctiformibus, 140-230 μ diam., atris, 1-locularibus, rarissime binis confluentibus et tunc 2-locularibus, convexulis, minute ostiolatis; ascis oblongo-clavatis, copiose paraphysatis, apice obtusis, brevissime stipitatis, 55-62 × 14-18, octosporis; sporidiis oblique monostichis v. distichis, ellipsoideis usque oblongis, utrinque obtusis, continuis, hyalinis, 12,5-16,5 × 5,5-6,5.

Hab. in foliis Dalbergiae Sissoo (Leguminosae), Wynaad, Indiae or. (W. Mc Rae).

98. **Phyllachora yapensis** (P. Henn.) Syd., Enum. Philipp. Fungi I, in 524
Philipp. Journ. of Sci. VIII (1913) p. 278. — *Dothidella yapensis* P. Henn. — Syll. XVII p. 848. — *Auerswaldia Derridis* P. Henn., Syll. XXII p. 428, *Phyllachora Lagunae* Rehm, Ascom. Philipp. III, in Philipp. Journ. of Sc. VIII, 1913, p. 396. — Cnfr. Theiss. et Syd., Ann. Mycol. 13., 1915, p. 498; Sydow, Philipp. Journ. of Sc. IX Sect. C., 1914, p. 168. — Teste cll. Sydow, specimina originalia sporidiis continuis nec bilocularibus gaudent, inde species ad gen. *Phyllachoram* adscribenda.

Hab. quoque in foliis Derridis spp. (Leguminosae), in Ins. Philipp., Derridis ellipticae, Ins. Yap (Carolina), Ins. Java. — Verisim. huc pertinet etiam *Cryptomyces Pongamiae* Racib. nec (B. et Br.) Sacc.

99. **Phyllachora affinis** Theiss. et Syd., Ann. Mycol. 13., 1915, p. 498 524
nom. nov., *Phyllachora yapensis* (P. Henn.) Syd. — Syll. XVII p. 848. — var. **rhytismoides** Rehm, Ascomyc. Philipp. V, Leaflets of Philipp. Botany, VI (1914) p. 2218. — Stromatibus epiphyllis, irregulariter orbicularibus, 5 mm. usque latis, loculos plurimos includentibus. Ceterum ut in specie.

Hab. in foliis Derridis philippinensis (Leguminosae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (M. B. Raimundo). — Primo aspectu *Rhytisma* videtur. — Sporidia, sec. Auct., 1-cellularia, guttis 2 magnis replete.

100. **Phyllachora Lathyri** (Lév.) Theiss. et Syd., Ann. Mycol. 13., 1915, 524
p. 501. — Syn. *Diachora Onobrychidis* (DC.) J. Müll., Syll. XI p. 374, *Mazzantia fennica* Lind, Ann. Mycol. 13., 1915, p. 22, fig. 2.

101. **Phyllachora Lonchocarpi** Har. et Pat. in Bull. Mus. Hist. Nat. 524

Paris 1911, p. 367; Theiss. et Syd., Ann. Mycol. 13., 1915, p. 503.— Epiphylla; stromatibus irregulariter angulosis, 1-3 mm. diam., nitidis, vix ostiolorum ope punctulatis, bullatis; loculis numerosis (10-15); ascis clavatis, paraphysatis, octosporis, 100 × 20; sporidiis irregulariter distichis, hyalinis, ellipsoideis, 14-16 × 9.

Hab. in foliis languidis, fere exsiccatis. Lonchocarpi (Leguminosae), Chari: Dar-Rounda, Dialmada, Congo gallico.

102. **Phyllachora Pahudiae** Syd., Enum. Philipp. Fungi I, in Philipp. Journ. of Sci. VIII (1913) p. 277 — Rehm, Ascomyc. n. 2048; Theiss. et Sydow, Ann. Mycol. 13., 1915, p. 506. — Stromatibus epiphyllis, in hypophyllo plus minusve conspicuis, innatis, leniss. prominulis, in greges circulares 3-10 mm. diam. concentrice dispositis, minutis, rotundatis, 0,25-0,5 mm. diam., subinde confluentibus et majoribus, atris; ascis... jam resorptis; sporidiis fusiformibus, utrinque attenuatis, continuis, hyalinis, 16-19 × 3,5-5. 5247

Hab. in foliis vivis Pahudiae rhomboideae (Leguminosae), Cebu, ins. Philipp.

103. **Phyllachora Peltophori** P. et H. Syd., Ann. Mycol. X, 1912, p. 40; Theiss. et Sydow, Ann. Mycol. 13., 1915, p. 507. — Stromatibus amphigenis, sparsis v. irregulariter aggregatis, perexiguis, $^1/_3$-0,5 mm. diam., leniter convexis, 1-paucilocularibus, atris; ascis clavatis, 65-80 × 14-18, octosporis; sporidiis oblique distichis usque subdistichis, ellipsoideis, 13-17 × 6-8, utrinque rotundatis, continuis, hyalinis. 5248

Hab. in foliis Peltophori africani (Leguminosae), Ledgee Zoutpansberg, Transvaal (E. M. Doidge).

104. **Phyllachora Phanerae** Racib. in Theiss. et Syd., Ann. Mycol. 13., 1915, p. 490. — Stromatibus epiphyllis, solitariis, rotundatis, carbonaceis, nitidulis usque 0,8 mm. latis in maculis flavescentibus insidentibus; loculis 2-4 in medio stromatum sitis rotundatis v. parum depressis 200 μ circ. diam., ostiolo punctiformi et parietibus pallide brunneis tenuioribus praeditis; paraphysibus filiformibus, hyalinis; ascis elongato-cylindraceis, apice rotundatis, medio latioribus utrinque angustatis, 90-110 × 15-18, octosporis; sporidiis monostichis, hyalinis, unilocularibus, levibus, 14-16 × 9. 5249

Hab. in foliis Phanerae sp. (Leguminosae), Tjampea prope Buitenzorg, Java. — Socia *Dothiopsis Phanerae* Rac. cuius status pycnidicus verisimiliter sistit.—Var. **longispora** Theiss. et Syd., l. c. p. 491.—*Phyll. tenuis* v. Höhn. nec B. et C.— A typo recedit sporidiis longioribus, 20-27 × 5-6,5. — *Hab.* in foliis Phanerae

glaucae, Buitenzorg, Java.

105. **Phyllachora phaseolina** Syd., Enum. Philipp. Fungi II, in Philipp. 5250
Journ. of Sci. VIII (1913) p. 494; Theiss. et Syd., Ann. Mycol. 13., 1915, p. 507. — Stromatibus epiphyllis, sparsis, leniter convexis, in hypophyllo non vel parum conspicuis, irregularibus, minutis, 0,4-1 mm. diam., atris, opacis, intus paucilocularibus; ascis cylindraceis vel clavatis, 40-50 × 10-14, octosporis; sporidiis subglobosis vel late ellipsoideis, continuis, hyalinis, 8-10 × 5-7.

Hab. in foliis Phaseoli calcarati (Leguminosae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (Baker).

106. **Phyllachora ? piptadenicola** Speg., Mycet. Argent. VI, Anal. Mus. 5251
Nac. Buenos Aires, XXIII (1912) p. 91. — Maculis nullis vel vix manifestis pallescentibus; stromatibus (peritheciis?) epiphyllis, gregariis vel hinc inde confertis sed non confluentibus, parenchymate innatis, minutis, prominulo-convexis, 180-250 μ diam., atris, nitidis, obsolete ostiolatis, unilocularibus, coriaceis, contextu indistincto; ascis subfusoideis, breviter cuneato-pedicellatis, 60-70 × 14-15, paraphysibus filiformibus parum longioribus parce obvallatis; sporidiis oblique 2-3-stichis, subellipsoideis, inaequilateris, utrinque subacutiusculis, eguttulatis, hyalinis, 14-16 × 6-7.

Hab. in foliis vivis Piptadeniae rigidae (Leguminosae), in silvis prope Puerto Léon, Misiones, Argentina.

107. **Phyllachora Pusaethae** v. Höhn., Fragm. zur Mykol. 771 in Stzgsb. 5252
Akad. Wiss. Wien CXXI, I, p. 389. — Syn. *Phyll. Entadae* Rac. ined. sec. Theiss. et Syd., Ann. Myc. 13., 1915, p. 508. — Stromatibus sparsis, singulis in maculis luteolis evanescentibus 2-3 mm. latis insidentibus, applanatis, circularibus, carbonaceis, nitidis, utrinque conspicuis, 0,3-1 mm. latis, 1-2-5-locularibus, contextu stromatis opaco, atro; loculis in sectione e rotundato angulatis, 150-300 μ latis, 240 μ altis, ostiolo minuto circulari pertusis; ascis fusoideo-clavatis basi in pedicellum 20 × 4 productis, apice conoideo-attenuatis, 50-80 × 10-12, paraphysibus tenuibus, curvulis obvallatis; sporidiis oblique distichis, oblongo-ellipsoideis, hyalinis, rectis, utrinque rotundatis, 12-13 × 4-5.

Hab. in foliis vivis Pusaethae (Entadae) sp. (Leguminosae), in horto botan. Buitenzorg, Java. — Stromata interdum in maculis majoribus non propriis insidentia.

108. **Phyllachora umbilicata** Theiss. et Syd., Ann. Mycol. 13., 1915, 5253
p. 510. — Rehm, Ascom. exs. n. 1565 (sub *Phyll. Trifolii*). — Stromatibus arcte gregariis, confluentibus minutis, prominentibus, um-

bilicatis, folium incrassantibus usque 240-280 μ (folium normale 140-170 μ cr.); loculis plerumque numerosis, globosis v. depresse globosis, 140-165 μ latis, $^2/_3$ folii occupantibus nec hypophyllum attingentibus; stratu ascigero typice phyllachoroideo; ascis breviter pedicellatis, 56-65 × 11-14, modice paraphysatis; sporidiis monostichis, unilocularibus, hyalinis, ellipsoideis, utrinque obtuse rotundatis, 11 × 5,5-6.

Hab. in foliis Trifolii Wormskiöldii (Leguminosae), Montana Point, California (COPELAND).

109. **Phyllachora Smilacis** Gz. Frag., Flor. Microm. Catal. 1917, p. 99, fig. 17. — Stromatibus irregularibus, 0.5-1 mm. lat., nigris, opacis, loculis paucis applanatis, subastomis; ascis oblongo-clavatis, 48-54 × 26-30, breviter pedicellatis, apice rotundatis crassiuscule tunicatis; paraphysibus filiformibus, guttulatis, subramosis; sporidiis irregulariter distichis, ovoideo-oblongis uno apice obtusioribus, 15-17 × 7-9, guttulis minutis et majusculis praeditis, continuis. 5254

Hab. in sarmentis emortuis Smilacis asperae (Liliaceae), La Rabasada pr. Barcelona, Hispaniae.

110. **Phyllachora Hugoniae** Theiss. et Syd., Ann. Mycol. 13., 1915, p. 512. — Stromatibus arcte gregariis foliicolis, utrinque visibilibus, irregulariter rotundatis, 1-2 mm. latis, depressis, parum prominentibus, nitide nigris, in hypophyllo parum elevatis, in epiphyllo minute ostiolatis; clypeo amphigeno epidermali 30-36 μ crasso; loculis folium percurrentibus, parum inter se remotis, depresse globosis, 300-400 μ latis 250 μ altis, parietibus tenuioribus (8-10 μ) brunneis praeditis, praecipue ad apicem hyphis stromaticis radiantibus praeditis; ascis cylindraceis, paraphysatis, 60-70 × 8-10; sporidiis monostichis, hyalinis, unilocularibus, ellipsoideis, rotundatis, 11 × 5,5. 5255

Hab. in foliis Hugoniae mystax (Linaceae), Ceylon, Asia.

111. **Phyllachora Banisteriae** F. L. Stevens et N. Dalby, Bot. Gazette 68., 1919, p. 54, tab. fig. 1-2. — Maculis nullis; stromatibus numerosis, sparsis, 1-2 mm. diam., rotundatis v. saepius elongatis, nigris, utrinque visibilibus, in mesophyllo parce evolutis; clypeo amphigeno, tenui, ab epidermide limitato; loculis paucis, latis, circ. 190 × 270; ascis octosporis cylindraceis; sporidiis oblongis, hyalinis, continuis, 35 × 14. — Conidia septorioidea, in pycnidiis supra stromata evolutis. 5256

Hab. in foliis Banisteriae tomentosae (Malpighiaceae), Vega Baja, Porto Rico. — A *Ph. pestis-nigra* Speg. pluribus

notis diversa.

112. **Phyllachora Melastomacearum** Racib. in Theiss. et Syd., Ann. Myc. 5257
13., 1915, p. 540. — Pseudostromatibus epiphyllis rotundatis v. polygoniis, usque 9 mm. latis, nigris, in maculis pallidis angustis et zonula nigro-violacea latiori limitata insidentibus; loculis 2-5 depresse globosis in folio omnino immersis, minute ostiolatis; loculis 100-140 μ altis 130-180 μ latis parietibus brunneis limitatis; ascis copiose paraphysatis, cylindraceis apice angustatulis, obtusis, octosporis, 98-106 × 12-14; sporidiis unilocularibus, ovoideis, levibus, hyalinis, monostichis, 10-13 × 6.

Hab. in foliis Dissochaetae sp. (Melastomaceae), Tjibodas in Gedeh et in Tankvetan Prave.

113. **Phyllachora Heterotrichi** F. L. Stevens et N. Dalby, Bot. Gazette 5258
68., 1919, p. 56 (corr. *heterotrichae*), tab. fig. 9-10. — Maculis parvis 2-4 mm. diam., subcircularibus, pallidis utrinque visibilibus; stromatibus nigris, ambitu irregularibus infra magis prominentibus, 1-2 mm. diam., totam crassitudinem foliorum occupantibus et majorem quam in parte normale foliorum; clypeo epidermico epiphyllo et saepe ultra perithecia effuso, in hypophyllo strictiore; loculis numerosis circ. 110-150 μ diam., parietibus bene evolutis; ascis octosporis; sporidiis 13-14 × 3,5-4, continuis, hyalinis.

Hab. in foliis Heterotrichi cymosi (Melastomataceae), Villa Alba, Porto Rico.— A *Ph. Melastomacearum* Rac. stromatibus a *Ph. aliena* peritheciis distincte minoribus diversa.

114. **Phyllachora aliena** H. et P. Syd., Ann. Mycol. X, 1912, p. 407.— 5259
Stromatibus epiphyllis, sparsis v. aggregatis, saepe annuliformiter dispositis confluentibus et tunc annulatis spatium medium vacuum relinquentibus, 1-2,5 mm. diam., primitus extus dilute brunneis, tandem atris, opacis, levibus, tenuibus, intus albidis; loculis ca. 8-20 in quoque stromate, rotundatis, omnino immersis, 125-150 μ diam.; ascis plerumque cylindraceo-clavatis, 80-100 × 9-10, octosporis; sporidiis monostichis, ellipsoideo-oblongis, utrinque rotundatis, continuis, hyalinis, 9-12 × 4-5.

Hab. in foliis Memecyli edulis (Melastomaceae), Matheran, Bombay Presid., Indiae or. (S. L. Ajrekar).

115. **Phyllachora neomexicana** Trotter n. nov. — *Phyllachora mexicana* 5260
Sacc., Ann. Mycol. XI, 1913, p. 546, nec Turconi, Syll. XVII p. 832. — Stromatibus hypophyllis, subsuperficialibus, 10-20 hinc inde in soros laxe congregatis, aterrimis, 0,5 mm. diam., loculis globosis nonnihil protuberantibus, 100 μ diam., poro minuto pertusis; ascis

cylindraceis, apice rotundatis, crasse brevissimeque pedicellatis, 95-98 × 11-11,5, paraphysibus filiformibus copiosis multo superantibus (h. e. 140-160 × 7-9) hyalinis obvallatis; sporidiis oblique monostichis ellipsoideis, 12-14 × 9-11, dilutissime chlorinis, senio fuscellis, levibus.

Hab. in foliis nondum emortuis Miconiae sp. (Melastomataceae), Oaxaca (Mexico). — A *Phyll. Miconiae* P. Henn. (non Duby) ascis cylindricis, a *Physalospora Miconiae* (Duby) Sacc. stromatibus exclusive hypophyllis, a *Phyll. Sellowii* P. Henn. sporidiis multo crassioribus, stromatibus non sparsis etc. dignoscenda species. Fungus Dubyi videtur affinior et aptius *Phyllachora Miconiae* (Duby) Sacc., nuncupandus; tunc species homonyma Henningsii, *Phyllachora Henningsiana* Sacc. dicenda est. — *Phyllachora laurina* Cke, teste Theissen et Syd., Ann. Mycol. 13., 1915, p. 568, non differt, sed revera in Miconia, non in Lauro nascitur.

116. **Phyllachora miconiicola** Spegaz., Fungi Costaric. nonn. in Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 205. — Epiphylla; maculae orbiculares, 2-6 mm. diam. centro rufescentes, ambitu late atro-caerulescentes indeterminatae; stromata in parte centrali macularum innato-prominula, parvula, 120-200 μ diam. saepius 2-5-gregaria ac confluentia, atra, laevia, opaca, perforato-ostiolata, contextu indistincto; asci cylindracei paraphysati 8-spori, breviter pedicellati 90-100 × 12; sporae ellipticae utrinque acutiusculae, non v. grosse 1-guttulatae, laeves, hyalinae, 15 × 7-8. 5261

Hab. in foliis vivis Miconiae cujusdam ignotae, in silvis Volcàn de Poas, Costarica, America trop.

117. **Phyllachora Mouririae** Syd., Ann. Mycol., 14., 1916, p. 83. — Stromatibus utrinque perspicuis, sparsis, rotundatis, 1-1,5 mm. diam., atro-nitidis, ob loculos prominulos rugulosis, paucilocularibus, totam folii crassitudinem occupantibus, sine maculis; clypeo in utraque epidermide, 60-80 μ crasso, densissimo, opaco, aterrimo; loculis variabilibus, mox altioribus quam latioribus, mox e contra latioribus quam altioribus usque 350 μ; ascis cylindraceis, 80-100 × 10, paraphysatis, octosporis; sporidiis plerumque oblique monostichis, fusiformibus, utrinque leniter attenuatis, continuis, hyalinis, 18-22 × 4. 5262

Hab. in foliis Mouririae Apiraugae (Melastomataceae), Seringal Auristella, Peruvia.

118. **Phyllachora Meliae** Pat., Bull. Soc. Mycol. Fr. 29., 1913, p. 226. — Stromatibus epiphyllis, sparsis, parvis, angulosis, orbicularibus v. elongatis, nitidis, convexis, glabris, 1-5 locularibus, ovoideis, nucleo 5263

mucoso albo praeditis; ascis clavatis, 4,5-7,5 × 15-18, octosporis; paraphysibus cylindraceis, hyalinis, mucosis, septatis, 3-4 μ cr.; sporidiis distichis, hyalinis, ovoideis, 10-12 × 5-6, contextu primum granuloso dein aequali.

Hab. in foliis Meliae Azedarach (Meliaceae), Hanoi Tonkin, Cinae (Duport).

119. **Phyllachora Bersamae** Lingelsh., Engler, bot. Jahrb. 39., 1907, p. 604. — Maculis primo carbonaceo-nigris dein flavido-fuscis; ostiolis punctiformibus v. conicis, nigris gregariis; peritheciis immersis, nigris, applanatis, maturis 150-170 μ alt. 450-480 μ latis; ascis octosporis clavatis 60-70 μ long., membrana tenuissima praeditis; sporidiis mono-v. distichis, flavidis, ellipsoideis, 14-16 × 9,5-10, biguttulatis oleosis instructis, paraphysibus hyalinis filiformibus. 5264

Hab. in foliis Bersamae abyssinicae (Melianthaceae), Deru, prov. Tschertscher, 2300 m. alt., Aetyopia.— Sec. Theiss. et Syd., Ann. Mycol. 13., 1915, p. 565, eadam est ac *Physalospora Bersamae* Syd., Syll. XXII p. 82.

120. **Phyllachora dolichospora** Syd. in Syd. et Butl., Ann. Mycol. IX, 1911, p. 396, Theiss. et Syd., Ann. Mycol. 13., 1915, p. 476.— Stromatibus amphigenis, sparsis, irregularibus, rotundatis v. saepe angulatis, planis vix vel lenissime rugulosis, atris, usque 3 mm. long., loculis numerosis, dense stipatis, globosis, 140-200 μ diam.; ascis cylindraceo-clavatis, rectis vel curvulis, utrinque saepe attenuatis, 70-80 × 8-15, octosporis; sporidiis fusiformibus, utrinque attenuatis et plus minus acutis, continuis, hyalinis, in cumulo flavidis, 21-26 × 4-6. 5265

Hab. in foliis Tinosporae cordifoliae (Menispermaceae), Solebile, Mysore, Indiae or. (E. J. Butler).

121. **Phyllachora Cannabidis** P. Henn., Hedw. vol. 48 (1908) p. 8. — Stromatibus caulicolis dense gregariis, plano-pulvinatis, atro-opacis, angulato-rotundatis; ascis clavatis, apice rotundatis, octosporis, 45-55 × 10-12; sporidiis oblique monostichis vel distichis, subfusoideis vel ovoideis, hyalinis, continuis, nubilosis, 12-17 × 5-6. 5266

Hab. in caulibus Cannabidis sativae (Moraceae), Capital, S. Paulo, Brasilia. — Sec. Theiss. et Syd., Ann. Mycol. 13., 1915, p. 565, ad Clypeosphaeriaceas pertinet nec ad Phyllachoraceas.

122. **Phyllachora pseudes** Rehm, Ascomyc. Philipp. III, in Philipp. Journ. of Sci. VIII (1913) p. 396. — Theiss. et Syd., Ann. Mycol. 13., 1915, p. 470. — Stromatibus gregariis, folio plane innatis, utrinque dilute flavidule tectis, paginam superiorem folii protuberanti- 5267

bus ibique papillulis conoideis nigrescentibus prominentibus conspicuis, atris, subglobosis, 1 mm. circiter diam., loculos 3-5 includentibus, demum elapsis lacunulam in folii parenchymate relinquentibus; ascis clavatis, octosporis, aparaphysatis, 60 × 15; sporidiis distichis, oblongis, utrinque rotundatis, continuis, haud guttatis, hyalinis, 10-12 × 6-9.

Hab. in foliis Fici notae, Luzon, Prov. Laguna, Los Baños, ins. Philipp. (Baker). — Ob stroma in parenchymate omnino evolutum ut typus novi generis *Endophyllachora* Rehm habenda. — Affinis videtur *Phomatospora elastica* Zimm. sed ascis sporidiisque diversis.

123. **Phyllachora Dawei** Massee, Bull. Bot. Garden Kew 1908, p. 218.— 5268
Stromatibus epiphyllis, superficialibus, effuso-crustaceis, bullatis, atris, rugulosis, 4-7 mm. diam., subglobosis, laxe aggregatis vel confluentibus, dense loculiferis, contextu indistincto; loculis saepe confluentibus, difformibus; ascis cylindraceis, apice rotundatis, deorsum attenuato-pedicellatis, 80-100 × 11-12, octosporis, dense paraphysatis; sporidiis oblique monostichis, hyalinis, ellipsoideis, utrinque rotundatis, continuis, 21-23 × 9-10.

Hab. in foliis vivis Ficus sp., vulgo « Kokamve » dicta, Buddu, Uganda, Afr. trop. (Dawe). — *Ph. repenti* Sacc. cognata; differt stromatibus latioribus non seriatis, sporidiisque crassioribus.

124. **Phyllachora Pittieri** Theiss. et Sydow, Ann. Mycol. 13., 1915, p. 5269
544. — Ita vocanda est *Phyll. Tonduzii* P. Henn. nec Bomm. et Rouss. — Syll. XVII p. 835. — In Myrsinaceis.

125. **Phyllachora gentilis** Speg. — Syll. XI p. 369. — Var. **Calyptranthis** 5270
Patouill., Bull. Soc. Mycol. 1912, p. 141. — Stromatibus sparsis, 1-3 mm. diam., orbicularibus v. confluendo angulosis, convexis, nigris lucidis, levibus v. ostiolis tantum punctulatis; maculis in foliis nullis in fructibus ex aureola rubrida constitutis; loculis paucis; ascis clavatis, apice rotundatis basi stipitato-attenuatis, 75-85 × 20, paraphysibus linearibus 2-3 μ cr., contentu granuloso subgelatinoso; sporidiis distichis, hyalinis, ellipsoideo-obtusis, 18-20 × 7, centro grosse uniguttulatis, tunica crassa praeditis; spermogoniis immixtis, sporulis filiformibus, hyalinis 15-18 × 1-1,5, copiosis.

Hab. in foliis fructibusque Calyptranthis Tonduzii (Myrtaceae), San Josè Costa Rica, America Centr.

126. **Phyllachora Rickiana** Theissen, Ann. Mycol. 16., 1918, p. 185, 5271
Dothidella? *placentiformis* Rehm, Ascom. 1790, Theissen Dec. fung. brasil. 40-41. — Clypeo epidermali amphigeno 2-3 mm. lato, extus

nitide nigro, inflato, folium usque 500 μ cr. (nec 279 μ ut in folio normale), 40-50 μ cr.; peritheciis globosis collo terminatis, circ. 400-430 μ altis et latis, distinctis, in epiphyllo aperientibus, membrana brunnea distincta crassitudine variabili praeditis; ascis lateraliter radiantibus, paraphysatis, 68-78 × 14-15; sporidiis distichis ellipsoideis, 10-13 × 6, hyalinis, unilocularibus.

Hab. in foliis Campomanesiae sp. (Myrtaceae), Rio Grande do Sul, Brasilia (THEISSEN).

127. **Phyllachora ambigua** (Syd.) Syd., Ann. Mycol. 13., 1915, p. 537, 5272
Trabutia ambigua Syd. in Syd. et Butl., Ann. Mycol. IX, 1911, p. 411; Theiss. et Syd., Ann. Mycol. 13., 1915, p. 537. — Stromatibus epiphyllis, sparsis, planis, rotundatis v. irregularibus, 1,5-4 mm. long., atris, opacis, haud typice evolutis, perithecia crusta atra stromatica obtegentibus; peritheciis numerosis in quoque stromate, contextu foliorum omnino immersis, in hypophyllo etiam sed paullo manifestis, irregulariter distributis v. dense aggregatis, globosis, 150-200 μ diam., pariete proprio praeditis; ascis cylindraceis v. cylindraceo-clavatis, 48-60 × 8-12, octosporis; sporidiis plus minus irregulariter monostichis usque subdistichis, subglobosis v. late ellipsoideis, continuis, hyalinis, 9-11 × 6-8.

Hab. in foliis Eugeniae Jambolanae (Myrtaceae), Koppa Mysore, Indiae or. (E. J. BUTLER).

128. **Phyllachora rimulosa** Spegaz., Fungi Costaric. nonn., in Bot. Ac. 5273
Nac. Cienc. Cordoba, t. 23, 1919, Extr. p. 206. — Stromata epiphylla, irregulariter repando-elliptica, definita, tenuia, planiuscula, foveolis nonnullis pusillis rotundis impressis centro minute papillato-umbilicatis notata, primo laevia non v. vix subnitidula, serius opaca dense reticulato-rimulosa atque cortice crustoso frustulatim deciduo vestita; loculi parum numerosi, sub foveolis tantum siti, applanato-lenticulares minuti, 150-180 μ diam., eximie minuteque papillato-ostiolati; asci cylindracei, antice rotundati, postice breviter cuneato-pedicellati, 8-spori, paraphysati, 85-100 × 10; sporae oblique monostichae, ellipticae, utrinque rotundatae, saepius grosse triguttulatae, hyalinae, 14 × 8.

Hab. in foliis vivis Eugeniae (? costaricensis), (Myrtaceae), prope S. Josè Costarica, America trop.

129. **Phyllachora angustispora** Spegaz., Rel. Mycol. trop. etc. in Bol. 5274
Ac. Nac. Cienc. Cordoba, t. 23., 1919, p. 127. — Stromata saepius hypophylla repando-orbicularia, 0,5-2 mm. diam. innato-superficialia convexula leniter calliculosa, atra opaca v. vix nitidula; loculi sae-

pius pauci subglobosi, 120 × 150 μ diam. albo-farcti; asci subclavulati, apice subtruncati, deorsum sensim modiceque attenuato-pedicellati, octospori, aparaphysati 80-90 × 12-14; sporae recte distichae angustae utrinque attenuatae subacutiusculae, non v. vix inaequilaterales, hyalinae, 30 × 8-9.

Hab. ad folia viva Eugeniae sp. (Myrtaceae), prope Recoleta, Asunciòn, Paraguay, America austr. trop. (J. D. ANISITZ). — Proxima *Phyll. tropicali* Speg.

130. **Phyllachora curvulispora** P. Henn., Hedw. vol. 48 (1908) p. 7.— 5275
Stromatibus epiphyllis, sparsis vel aggregatis, rotundato-pulvinatis, 3-5 mm. diam., atro-nitentibus, loculis subglobosis, ostiolis vix prominulis; ascis clavatis, obtusis, octosporis, 60-80 × 10-20; sporidiis subdistichis, fusoideis, curvulis, hyalinis, intus granulosis, continuis, 17-20 × 5-7.

Hab. in foliis Myrtaceae, Morro Pellado, S. Paulo, Brasilia.

131. **Phyllachora Nepenthidis** Rac. in Theiss. et Syd., Ann. Mycol., 13., 5276
1915, p. 484. — Stromatibus irregulariter sparsis, nigris, intus subcarbonacis, rotundatis v. breviter ellipsoideis prominentibus, 2-3 mm. latis, parum nitidis, zona angusta flavidula circumdatis; loculis 2-3, v. usque 10 et tunc anulatim dispositis, in hypophyllo minute ostiolatis, depresse ellipsoideis 150-180 μ altis 200-300 μ latis; paraphysibus filiformibus; ascis cylindraceis, tenuiter tunicatis, apice rotundatis, 130-140 × 8-11, octosporis; sporidiis monostichis, ovato-globosis, levibus, hyalinis, 8-10 × 6-7, utrinque late rotundatis.

Hab. in foliis Nepenthis melamphorae (Nepenthaceae), Gunung Gagak prope Salak, Java (RACIBORSKI).

132. **Phyllachora Mayepeae** F. L. Stevens et N. Dalby, Bot. Gazette, 5277
68., 1919, p. 56, tab. fig. 14. — Maculis irregulariter circularibus indefinitis folium pallidiorem reddentibus, 3-15 mm. diam.; stromatibus numerosis (5-50) nigris punctiformibus, utrinque aequaliter visibilibus, 200-1000 μ diam., mesophyllum occupantibus; clypeis amphigenis sed stromata vix leniter excedentibus; stromatibus unilocularibus; loculis latis, globosis, ascis numerosis, 58-85 × 18-27; paraphysibus filiformibus; sporidiis 9-19 × 7-12, hyalinis continuis,

Hab. in foliis Mayepeae domingensis (Oleaceae), Moricao, Mayaguez Mesa, Coamo, Porto Rico.

133. **Phyllachora Roystoneae** J. R. Johnston et St. C. Bruner, Myco- 5278
logia 10., 1918, p. 43, tab. 2. — Stromatibus subcutaneis epidermide et mesophyllo innatis, nigris carbonaceis, gregariis, in greges elongatos (2-5 cm. × 1-6 mm.) congestis; stromatibus singulis e

subrotundatis subellipticis e convexis conico-convexis plerumque 0,3-1 mm. diam.; loculis subrotundatis in stratum confertis 260-430 μ diam., ostiolo erumpenti praeditis indistincto v. leniter papilliformi; ascis clavatis apice rotundatis v. subapplanatis stipitatis, 116-186 × 12-20, octosporis; paraphysibus nullis v. mox evanidis; sporidiis irregulariter e monostichis subdistichis, fusoideis, utrinque subacutis, hyalinis, tenuiter tunicatis; granuloso-farctis, plerumque multiguttulatis, 22-28,4 × 8-10.

Hab. in foliis vivis Roystoneae regiae (Palmae), Rincon Havana, Cuba.

134. **Phyllachora aequatoriensis** Theiss. et Sydow, Ann. Mycol. 13., 1915, p. 521. — Ita vocanda *Phyll. dendritica* Rehm (Syll. XI p. 371) nec *dendritica* Cke quae anterior. — In Polygalaceae. 5279

135. **Phyllachora Rhopalae** P. Henn., Hedw. vol. 48 (1908) p. 7. — Stromatibus epiphyllis, gregariis, angulato-pulvinatis, atro-nitentibus, 3-4 mm. diam., loculis subglobosis, immersis, fuscis; ascis clavatis, vertice obtuse rotundatis, octosporis, paraphysatis, 100-110 μ longis, p. sp. 80-90 × 9-11; sporidiis oblique monostichis, ellipsoideis, continuis, hyalinis, 12-18 × 6-7. 5280

Hab. in foliis Rhopalae brasiliensis (Proteaceae), Morro Pellado, S. Paulo, Brasilia. — A *Ph. rhopalina* (Mont.) Sacc. distincta.

136. **Phyllachora vesicata** Cooke, Grev. XIII p. 63; Theiss. et Syd., Ann. Mycol. 13., 1915, p. 485. — Hypophylla; maculis fuscis, irregularibus, confluentibus; stromatibus gregariis, atris, oblongo-angulatis, convexis, minutis; loculis immersis, albis; ascis clavatis; sporidiis ellipticis, continuis, hyalinis, 10 × 4. 5281

Hab. in foliis Hirtellae vesicatae (Rosaceae), Amazonas (Spruce).

137. **Phyllachora Physocarpi** Jacz., Fungi Ross. exs. n. 290; Theiss. et Syd., Ann. Mycol. 13., 1915, p. 486. — Stromatibus gregariis, prominentibus, maculis rubridis limitatis, minutis, 0,25-0,4 mm. latis, 1-3 locularibus; clypeo epidermoidali, epaco; loculis globosis 120-140 μ v. depressis et usque 200 μ latis, 130-160 μ altis; ascis clavatis, pedicellatis, paraphysatis, 60-70 × 16-20; sporidiis polystichis, hyalinis, unilocularibus, elongatis, 16-18 × 6-7. 5282

Hab. in foliis Physocarpi (Spiraeae) amurensis (Rosaceae), Amur, Asiae.

138. **Phyllachora Ixorae** Theiss. et Syd., Ann. Mycol. 13., 1915, p. 553. — Stromatibus epiphyllis, sparsis, 1-2 mm. circ. latis, nitide nigris, 5283

rotundato-prominulis, zonula angusta limitatis, in hypophyllo non conspicuis, plurilocularibus; loculis in clypeo nigro epidermoidali 40-50 μ cr. immersis mesophyllum incrassantibus, 300-380 μ latis, 240-280 μ altis, arcte confertis, parietibus stromaticis tenuibus mollibus, brunneis praeditis; stromate hyphali inter loculos sito hinc inde incrassato; ascis cylindraceis, paraphysatis, breviter pedicellatis, octosporis, 65-80 × 8-10; sporidiis monostichis, elongato-ellipsoideis, utrinque rotundatis, rectis, hyalinis, unilocularibus, 9-11 × 4-5.

Hab. in foliis Ixoraae parvifoliae (Rubiaceae), Indiae or. (Hobson).

139. **Phyllachora Glycosmidis** Petch, Ann. R. Bot. Gard. Peradeniya, v. VI, P. III, 1917, p. 227. — Stromatibus rotundatis, ad 2 mm. diam., multilocularibus, loculis ad 0,3 mm. diam., ostiolis non prominentibus; ascis cylindraceis, circa 100 × 6, longe pedicellatis, sporis oblique uniseriatis; sporis oblonge ovoideis, obtusis, hyalinis continuis, 8-12 × 4-5. 5284

Hab. in foliis Glycosmis pentaphyllae (Rutaceae), Nalanda, Ceylon.

140. **Phyllachora Meliosmae** Racib. in Theiss. et Syd., Ann. Mycol. 13., 1915, p. 527. — Stromatibus rotundatis, nigris, 2-3 mm. latis, irregulariter sparsis in macula pallide flava insidentibus; loculis usque 15, parum distinctis ostiolo vix prominenti praeditis, usque 300 μ latis usque 250 μ altis; paraphysibus filiformibus; ascis cylindraceo-fusoideis, medio latioribus apice obtusis, 80 × 8, octosporis; sporidiis hyalinis, monostichis medio quandoque distichis, ovoideis, utrinque acutatis, 13 × 5-6. 5285

Hab. in foliis Meliosmae sp. (Sabiaceae), Depok prope Buitenzorg, Java.

141. **Phyllachora Serjaniae** Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires XXIII (1912) p. 92. — Maculis amphigenis circularibus, 5-15 mm. diam., indeterminatis, parum manifestis, pallescentibus; stromatibus epiphyllis, mediocribus, circinantibus, repandulo-suborbicularibus, 1-3 mm. diam. vix convexulis, nigris, glabris, nitidulis; loculis pluribus, lenticularibus, 180-220 μ diam., obsolete ostiolatis, albo-farctis; ascis cylindraceis longiuscule pedicellatis, p. sp. 80-100 × 15-20, pedicello 20-30 × 5-10, parce paraphysatis vel etiam paraphysibus carentibus; sporidiis e cylindraceo-ellipsoideis, utrinque obtusissimis, saepius grosse 1-2-guttulatis, hyalinis, 15-20 × 10-12. Jodi ope nulla. 5286

Hab. in foliis vivis Serjaniae caracasanae (Sapin-

daceae), in silvis prope Calilegua, Salta, Argentina. — A *Ph. repente* (Cda.) Sacc. stromatibus majoribus, ascis longius pedicellatis sporidiisque crassioribus et magis obtusis recedere et distincta videtur.

142. **Phyllachora fluminensis** Theiss. et Syd., Ann. Mycol. 13., 1915, p. 551, *Physalospora fluminensis* Theiss., Broteria 1914, XII, p. 27, fig. 6 b.— Epiphylla, at totam folii laminam pervadens, utrinque prominula, lenticulariter orbicularis v. ellipsoidea, 250-340 μ alta, usque 450 μ lata, macula brunnescente cincta, ostiolo centrali non papillato minuto, atro-nitens, sparsa; asci cylindracei, octospori, paraphysibus numerosis; sporidiis ovato-ellipsoideis, rotundatis, hyalinis, oblique monostichis, 12-14 × 8. 528

Hab. in foliis Solani sp. (Solanaceae), Rio de Janeiro, Brasiliae (Theissen).

143. **Phyllachora Dombeyae** (Syd.) Syd., Ann. Mycol. 13., 1915, p. 532, *Physalospora Dombeyae* H. et P. Syd., l. c. 10., 1912, p. 441.— Peritheciis epiphyllis maculis flavidis indeterminatis insidentibus, irregulariter aggregatis, immersis, parte superiore prominulis, depresso-globulosis, atris subopacis, phyllachoroideis, 100-130 μ diam., minute papillatis; ascis clavatis, apice plerumque rotundatis, 50-75 × 15-20, octosporis, indistincte paraphysatis; sporidiis di-tristichis inaequilateris v. lenissime falcatulo-curvatis, continuis, sed plasmate distincte bipartito, utrinque leniter attenuatis, sed apicibus obtusulis, hyalinis, 25-35 × 3-4,5; pycnidiosporis simul praesentibus filiformibus, varie curvatis, saepe uncinatis, continuis, hyalinis, 18-26 × 1-1,5. 528

Hab. in foliis vivis Dombeyae rotundifolias (Sterculiaceae), Equeefa, Natal, Africa austr. (O. Fuller).

144. **Phyllachora ? Guazumae** P. Henn., Hedw. vol. 48 (1908) p. 7; Theiss. et Syd., Ann. Mycol. 13., 1915, p. 532. — Maculis rufo-fuscidulis, rotundatis vel effusis; stromatibus epiphyllis, sparsis, rotundato-pulvinatis, atris, plurilocularibus ostiolatis; ascis clavatis, obtusis, octosporis, paraphysatis, 70-75 × 7-8; sporidiis oblique monostichis, ellipsoideis, ? hyalinis, immaturis. 5289

Hab. in foliis Guazumae ulmifoliae (Sterculiaceae), Iponema, Pedro Santa, S. Paulo, Brasiliae.

145. **Phyllachora Pterospermi** Syd., Ann. Mycol. 15., 1917, p. 226. — Stromata epiphylla, maculis orbicularibus $^1/_2$-1 cm. diam. flavidulis immarginatis plerumque circulariter insidentia $^3/_4$-1 mm. diam., atro-nitentia, plerumque unilocularia, rarius paucilocularia convexa, cly- 5290

peo crasso aterrimo; asci ovales vel oblongi, paraphysati, 50-65 × 18-25, octospori; sporae ovato-ellipsoideae, continuae, late rotundatae, hyalinae, 15-20 × 9-11.

Hab. in foliis Pterospermi diversifolii (Sterculiaceae), Los Baños, Laguna, ins. Philipp. (C. F. Baker).

146. **Phyllachora transiens** Syd. et Butl., Ann. Mycol. IX, 1911, p. 397.— 5291
Stromatibus hypophyllis, maculis flavidis orbicularibus vix limitatis insidentibus, minutis, 0,5-1 mm. diam., in greges rotundatos 3-5 mm. latos plerumque dispositis, 1-vel confluendo pauciloculaaribus, atris, leniter prominulis, opacis; ascis cylindraceo-clavatis v. fusoideis, octosporis, breviter stipitatis, 50-70 × 10-11; sporidiis distichis, oblongis, hyalinis, continuis, 20-22 × 5-7.

Hab. in foliis Euryae acuminatae (Theaceae), Kumaon, Hymalaya, Indiae or. (Inayat).

147. **Phyllachora permixta** Syd. in Syd. et Butl., Ann. Mycol. IX, 1911, 5292
p. 397. — Stromatibus innatis, amphigenis, maculis decoloratis indeterminatis plerumque insidentibus, in greges orbiculares v. irregulares 2-10 mm. latos plus minusve dense confertis, minutissimis, punctiformibus, plerumque 1-locularibus, majoribus subinde pauciloculaaribus, atris; ascis clavato-cylindraceis, 60-80 × 14-17, octosporis; sporidiis late ellipsoideis, utrinque rotundatis, continuis, hyalinis, monostichis, 12-16 × 6-8.

Hab. in foliis Schimae Wallichii (Theaceae), Maymyo, Burma, Indiae or. (E. J. Butler).

148. **Phyllachora clypeata** Theiss. et Syd., Ann. Mycol. 13., 1915, p. 5293
529, *Physalospora clypeata* Theiss. Broteria, XII (1914) p. 27.— Stromatibus epiphyllis, amphigenis, irregulariter sparsis v. compluribus in maculis rotundatis approximatis, in epiphyllo 0,5-0,8 mm. latis prominentibus, nitide nigris, in hypophyllo minoribus 0,3-0,4 mm., opacis, unilocularibus; loculis folium percurrentibus, depresse ellipsoideis, 340-420 μ latis 200-270 μ altis, supra et infra clypeo epidermoidali limitatis; parietibus lateralibus brunneis distinctis sed tenuioribus mollioribusque quam stromate clypeali; ascis e cylindraceo-clavatis usque ventricosis, copiose paraphysatis, 75-90 × 18-20; sporidiis monostichis v. distichis, ellipsoideo-elongatis, hyalinis, unilocularibus, utrinque rotundatis, 16-20 × 8.

Hab. in foliis Tiliaceae cujusdam, Sao Leopoldo, Rio Grande do Sul, Brasilia.

149. **Phyllachora Premnae** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 5294
564. — Stromatibus epiphyllis, innatis, sed in hypophyllo non vi-

sibilibus, sparsis vel compluribus irregulariter aggregatis, quoad formam et magnitudinem valde variabilibus, 1-4 mm. diam., saepe confluentibus, leniter convexulis, superficie ob ostiola leniter prominentia nitidula rugulosis, intus multilocularibous; stylosporis filiformibus, varie curvatis, saepe falcatis, continuis, hyalinis, 17-24 × 1; ascis immaturis tantum visis.

Hab. in foliis Premnae Cumingianae (Verbenaceae), San Antonio prov. Laguna, Luzon, Ins. Philippin. (M. Ramos). — Status conidicus tantum descriptum et tunc aegre ad *Phyllachoram* pertinens. Cnfr. Theiss. et Syd., Ann. Mycol. 13., 1915, p. 575.

150. **Phyllachora Ochnae** Pat. et Har., Bull. Soc. Mycol. Fr. 28., 1912, p. 283. — Theiss. et Syd., Ann. Mycol. 13., 1915, p. 532.— Maculis amphigenis exaridis, orbicularibus, 6-8 mm. diam., fuscescentibus; stromatibus amphigenis minutis, $^1/_3$-0,5 mm. diam., circulatim fere regulariter dispositis, atris, nitentibus, convexis, loculis paucis (1-2); ascis clavatis, 60 × 12, octosporis; sporidiis pluriseriatis, hyalinis, elongatis, rectis, utrinque subattenuatis, intus pluriguttulatis, 24 × 5. 529

Hab. in foliis Ochnae sp. (Vitaceae), Ste-Marie-de Madagascar (Boivin), Palawan, Ins. Philipp.

151. **Phyllachora congregata** Theiss. et Syd., Ann. Mycol. 13., 1915, p. 520. — Stromatibus hypophyllis, maculis nullis, minutis, punctiformibus, hinc inde gregariis dein confluentibusque, opace nigris, plerumque unilocularibus; clypeo epidermoidali 25-30 µ cr.; loculo late piriformi dimidium crassitudinis foliorum attingenti, 200-280 µ diam.; ascis cylindraceo-clavatis, paraphysatis, 70-90 × 12-15, octosporis; sporidiis monostichis v. distichis, oblongis, utrinque parum angustatis apice rotundatis, unilocularibus, hyalinis, 15-18 × 5-6; loculis conidialibus parvis globosis 100-120 µ diam.; conidiis filiformibus, curvatis, unilocularibus, hyalinis, 12-14 × 0,75. 529

Hab. in foliis Vochysiae ellipticae (Vochysiaceae), Brasilia (Sello).

152. **Phyllachora Gnipae** F. L. Stevens et N. Dalby, Bot. Gazette 68., 1919, p. 56, tab. fig. 27, 28. — Maculis numerosis 0,5-1,5 cm. diam., stromata irregulariter circumdantibus, utrinque brunneis vetustate albicantibus; stromatibus irregulariter rotundatis v. angulosis, 2-5 mm. diam., supra nitide nigris infra pallidioribus, ob perithecia rugulosis; clypeo utrinque 30 µ circ. cr., loculis latiore; loculis numerosis magnitudine variabilibus e 190 × 95 usque ad 380 × 190, in mesophyllo innatis; stromatibus loculos parum evolutos circumdantibus; ascis cylindraceis octosporis; sporidiis oblongis, hyalinis, 52

continuis, guttulatis et granulosis, obtusis, 18-20 × 6-7.

Hab. in foliis Gnipae americanae (?), El Gigante, Porto Rico.

153. **Phyllachora infesta** Theiss. et Syd., Ann. Mycol. 13., 1915, p. 562.— 529
Stromatibus arcte confertis 400-500 μ latis in maculis 2-3 mm. latis irregulariter rotundatis; stromatibus in utraque pagina conspicientibus, medio conoideo-elevatis, nitidis, margine depressis, opacis, subconfluentibus; loculis singulis folium percurrentibus, depresse globosis 270-330 μ latis 200-220 μ altis, supra et infra clypeo epidermoidali nigro 17-20 μ cr. tectis; loculis parietibus stromaticis propriis destitutis et in mesophyllo immersis; ascis paraphysatis, cylindraceis, octosporis, 65-80 × 10-14; sporidiis monostichis, v. distichis, elongatis, hyalinis, unilocularibus, utrinque rotundatis, rectis, 12-13 × 5-5,5.

Hab. in foliis ignotis, Congo, Africa (VANDERYST).

PHYLLACHORELLA Syd., Ann. Mycol. 12., 1914, p. 489. — Stroma *Phyllachorae*. Asci aparaphysati. Sporidia continua, hyalina.

1. **Phyllachorella Micheliae** Syd., l. c. — Stromatibus hypophyllis, in 5299
epiphyllo maculas leniter depressas efficientibus, sparsis, rotundatis, 1-4 mm. diam., ca. 200 μ altis, pro ratione parum immersis, matricem elevantibus, atris; loculis dense stipatis, globosis, 140-170 μ diam.; ascis clavatis, apice rotundatis, breviter stipitatis, 55-75 × 18-22, octosporis, aparaphysatis; sporidiis distichis, ovato-oblongis, medio saepe contractis, continuis, hyalinis, 16-18 × 8-9.

Hab. in foliis Micheliae niligiricae (? Magnoliaceae), Ootacamud, Niligiris Madras Pres., Indiae or. (W. MAC RAE).

2. **Phyllachorella oceanica** Ferdinandsen et Winge, Mycologia 12., 1920, 5300
p. 103, cum icon. — Stromatibus matrici tumefactae insidentibus, strato corticali innatis, nunc unilocularibus punctiformibus, nunc crustas moriformi-tuberculatas, usque ad 1 cm. latas formantibus, atris; loculis in tuberculo singulo stromatis pluribus immersis, fere globosis, 500-800 μ diam., supreme strato nigrefacto crasso, quod saepius inter loculos plus minusve prorepit eosque interdum cingit, tectis; stratis subjacentibus matricis hyphis fungi intertextis. Ascis late ellipsoideis, plerumque 55-77 × 24-32, sessilibus; paraphysibus nullis; sporidiis octonis, distichis, continuis, hyalinis, multiguttulatis, plurimis, 20-30 × 10-13, forma (? secundum aetatem) valde varia; saepius ellipsoideis utrinque late rotundatis vel truncatis, rarius fusiformibus, apicula recta v. subcurvata praeditis.

Hab. in thallo duabus specierum Sargassi (Algae) (a O Winge descriptae), Lat. 32°.21' N, long. 45°.20' W (C. H. Ostenfeld).

PUIGGARINA Spegaz., Rel. Mycol. trop. etc. in Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 123 (Etym. a Cl. J. Puiggari). — Stromata biophila phyllogena innata unilocularia astoma v. obsolete ostiolata atra coriacea; asci octospori; sporae unicellulares hyalinae. — Est *Phyllachora* stromatibus unilocularibus praedita multae species ad gen. *Phyllachoram* v. etiam *Physalosporam*, et *Trabutiam* huc pertinent.

1. **Puiggarina microtheles** Spegaz., l. c., Extr. p. 125 cum icon. — Maculae nullae v. parvae indeterminatae amphigenae 1-3 mm. diam.; stromata epiphylla sparsa v. 2-3 laxe gregaria minuta innata sublenticularia 120-200 mm. diam. nigra nitentiuscula, minute ostiolata; asci cylindracei breviter crasseque pedicellati parce paraphysati 60 × 8-10; sporae elliptico-subfusoideae utrinque acutiusculae, hyalinae, continuae, 12-14 × 5-6. 5301

   Hab. ad folia Trichoclines nutantis (Compositae), prope Apiahy Brasiliä (J. Puiggari).

2. **Puiggarina myiocoproides** Spegaz., l. c., Extr. p. 126.— Hypophylla, gregaria, maculis destituta, innato-superficialia pusilla nigra subnitidula, semper 1-locularia 150-200 μ diam., obsolete ostiolata, coriaceo-subcarbonacea, contextu atro indistincto; asci subcylindracei, superne rotundati deorsum breviter cuneato-attenuati, paraphysati octospori, 60-70 × 6-7; sporae oblique monostichae, e cylindraceo subellipticae saepius leniter naviculares, utrinque obtusae, grosse 2-guttulatae, laeves, hyalinae, 8-10 × 4. 5302

   Hab. ad folia viva?, Dalbergiae? (Leguminosae), prope Villarica, America austr. trop. (B. Balansa).

3. **Puiggarina costaricensis** Spegaz., Fungi Costaric. nonn., in Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 204 cum icon. — Stromata saepius hypophylla, solitaria v. laxe 2-3-gregaria, non maculifera, innato-prominula convexulo-lenticularia, 200-250 μ diam., ostiolata, atra carbonacea laevia non v. vix nitidula; loculi solitarii, nucleo albido farcti; asci quandoque clavati, 90-100 × 10-20, sporis eorum dimidio supero conglobatis, dimidio infero longe attenuato-pedicelliformi, quandoque cylindracei, sporis per tota longitudine oblique monostichis, apice obtusissime rotundati; sporae ex elliptico subglobosae, laeves, nubilosae, hyalinae, 14 × 10-11. 5303

   Hab. in foliis vivis Buettneriae carthagenensis

(Sterculiaceae), ad rivum Maria Aguilar et circa San Josè, Costarica, America trop.

Sect. 2. Phaeosporae

PHAEOCHORA v. Höhn., Fragm. z. Mykol. IX. 1909, p. 444. — Theiss. et Syd., Ann. Mycol. 13., 1915, p. 401. — Est *Catacauma* aparaphysata, sporidiis brunneis continuis donata. — Typ. gen.:

1. **Phaeochora Chamaeropis** (Cooke) v. Höhn., l. c., *Auerswaldia Chamaeropis* (Cooke) Sacc., Syll. II, p. 626. — Etc. 5304

PHAECHORELLA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 405. — Est *Catacauma* paraphysata, sporidiis brunneis unilocularibus donata. — Typ. gen.:

1. **Phaeochorella Parinarii** (P. Henn.) Th. et Syd., l. c., *Cocconia Parinarii* P. Henn., Syll. XVIII p. 159. 5305
2. **Phaeochorella clypeata** (Wint.) Th. et Syd., l. c., *Auerswaldia clypeata* Wint., Syll. IX p. 1032. 5306

PHAEOTRABUTIELLA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 360. — Est *Trabutiella* phaeospora et paraphysibus destituta. — Typ. gen.:

1. **Phaeotrabutiella perisporioides** (Sacc.) Theiss. et Syd., l. c., *Phyllachora perisporioides* Sacc., Syll. XI p. 373. 5307

Sect. 3. Hyalodidymae

MUNKIODOTHIS Theiss. et Syd., Ann. Mycol. 13., 1915, p. 360. — Est *Trabutia* sporidiis hyalinis inaequaliter septatis donata, paraphysibus praesentibus. — Typ. gen.:

1. **Munkiodothis melastomata** (v. Höhn.) Theiss. et Syd., *Munkiella melastomata* v. Höhn., Syll. XXII p. 434. 5308

OMPHALOSPORA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 361. — Stromata subcuticularia, loculi prominentes. Paraphyses praesentes. Sporidia inaequaliter bilocularia, hyalina. — Typ. generis:

1. **Omphalospora Stellariae** (Lib.) Th. et Syd., l. c., *Dothidella Stellariae* (Lib.) Lind., Syll. XXII p. 432. 5309
2. **Omphalospora ambiens** (Lib.) Th. et Syd., l. c., cum icon, *Euryachora ambiens* (Lib.) Fuck., Syll. I p. 660 (descriptio nulla). — Stromatibus ut in *Omph. Stellariae*; hyphis subepidermicis reticulatim di- 5310

spositis ; loculis 50-55 μ cr. epidermidem elevatam reddentibus ; ascis caespitosis, basilaribus, aparaphysatis, irregulariter clavatis, 26-32 × 10-14, octosporis ; sporidiis 2-3-seriatis, elongatis, leniter clavatis, hyalinis, utrinque rotundatis, 7-10 × 2,5-3, loculo inferiori 2-3 μ.

Hab. in caulibus vetustis Stellariae nemorum (Cariophyllaceae), Germania.

REHMIODOTHIS Theiss. et Syd., Ann. Mycol. 12., 1914, p. 192 ; 13., 1915, p. 363. — Est *Trabutia* sporidiis hyalinis aequalibus donata ; paraphyses praesentes. — Typ. gen. :

1. **Rehmiodothis Osbeckiae** (B. et Br.) Th. et Syd., l. c., *Dothidella Osbeckiae* (B. et Br.) Sacc., Syll. II p. 633. 5311
2. **Rehmiodothis dothideoides** (Speg.) Th. et Syd., l. c., *Clypeolum dothideoides* Speg., Syll. IX p. 1061. 5312
3. **Rehmiodothis myrtincola** (Rehm.) Th. et Syd., l. c., *Dothidella myrtincola* Rehm, Syll. XI p. 375. 5313

ANISOCHORA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 406. — Est *Catacauma*, paraphysata, sporidiis hyalodidymis loculis inaequalibus donata. — Typ. gen. :

1. **Anisochora topographica** (Speg.) Theiss. et Syd., l. c., *Munkiella topographica* Speg., Syll. IX p. 1035. 5314

PLACOSTROMA Theiss. et Syd., Ann. Mycol. 12., 1914, p. 269 ; 13., 1915, p. 407. — Est *Catacauma* paraphysata, sporidiis hyalodidymis, loculis aequalibus donata.

1. **Placostroma Pterocarpi** (Mass.) Th. et Syd., l. c. *Dothidella Pterocarpi* Massee, Bull. Bot. Garden Kew, 1912, p. 357, fig. 5, 6, 9, 10 — Syn. *Phyllachora Pterocarpi* Rehm, Ascom. Philipp. in Philipp. Journ. of Sci. VIII, 1913, p. 397. — Maculis hinc inde sparsis, orbicularibus vel difformibus, determinatis, arescenti-fuscis, zona obscura cinctis ; stromatibus in centro macularum laxe aggregatis, matrici innatis, tumidulis, atris, nitentibus, subcarbonaceis, 1 mm. circ. latis ; ascis subcylindraceis, apice incrassato-rotundatis, basi modice attenuatis, pedicellatis, octosporis ; sporidiis oblique monostichis, ellipsoideis, hyalinis, medio septatis, non constrictis, 15-18 × 7-8. 5315

Hab. in foliis vivis Pterocarpi indici (Leguminosae), Kuala Lumpur, Malaya. — Nonnullis aliis speciebus jam editis ad hoc nov. gen. pertinent, de quibus cnfr. Th. et Syd. in l. c.

SCIRRHODOTHIS Theiss. et Syd., Ann. Mycol. 13., 1915, p. 415. — Est *Scirrhia* paraphysibus donata.

1. **Scirrhodothis Cyperi** (Wakef.) Trott., *Scirrhia Cyperi* Wakefield in Bull. Bot. Gard. Kew 1914, p. 158. — Stromatibus gregariis, oblongis, epidermide diu tectis, dein erumpentibus, atris, 1-4 mm. longis, ostiolis prominentibus; perithecciis in seriem linearem unicam vel duplam dispositis, 200 μ usque diam.; ascis clavatis, 65-75 × 8-9, octosporis; paraphysibus filiformibus; sporidiis subdistichis, hyalinis, fusoideis, subcurvulis, primo guttulatis dein 1-septatis, ad septa non vel vix constrictis, 17-18 × 4. 5316

   Hab. in caulibus foliisque Cyperi polystachyi (Cyperaceae), Nudgee, Queensland (C. F. White).

2. **Scirrhodothis seriata** (Syd. et Butl.) Th. et Syd., Ann. Mycol. 13., 1915, p. 416, *Scirrhia seriata* Syd. et Butl., Ann. Mycol. IX, 1911, p. 402. — Stromatibus epiphyllis, amoene longitrorsum seriatis, erumpentibus, atro-brunneis, oblongis, 1-2 mm. long. ca. $^1/_4$-$^1/_3$ mm. latis, matrice fissa cinctis, intus minute plurilocularibus; ascis clavatis, 48-66 × 11-15, octosporis; paraphysibus sparsis, septatis, filiformibus; sporidiis distichis, fusoideis, utrinque leniter attenuatis, medio 1-septatis et constrictis, hyalinis, 20-22 × 5,5-6,5. 5317

   Hab. in foliis Bambusae sp. (Graminaceae), Moulmein Burma, Indiae or. (E. J. Butler).— A *S. bambusina* Penz. et Sacc. et *S. luzonenzis* P. Henn. diversa.

3. **Scirrhodothis Bambusae** (Turc.) Trott., *Scirrhia Bambusae* Turconi in Rendic. Acc. Lincei, di Sc., ser. 5., XXV, 1°, p. 531 (1916) et in Atti Ist. Bot. Pavia XVI (1916) p. 251, tab. XVIII. — Stromatibus ellipsoideo-elongatis, sublinearibus, 1-2 mm. longis, 0,5-1 mm. latis, gregariis, quandoque longitrorsum seriatis, tectis dein rimose erumpentibus, atris; loculis in quoque stromate numerosis, plerumque 2-3-seriatis, subglobosis vel ovatis, 180-200 μ diam., cum stromatis substantia continuis vel vix discretis, ostiolis parum perspicuis vel brevissime prominulo-papillatis; ascis cylindraceo-clavatis, superne obtuse rotundatis, inferne subattenuatis ac breve crasseque stipitatis, paraphysibus filiformibus guttulatis obvallatis, octosporis; sporidiis distichis vel oblique monostichis, oblongo-clavatis, deorsum attenuatis ac plus minusve curvatis, prope basim distincte 1-septatis, ad septum non vel leniter constrictis, granulosis, guttulatis, hyalinis 20-24 × 8-12. Status conidicus *Melanconium Bambusae* Turc., quod confer. 5318

   Hab. in culmis ramulisque Bambusae mitis, nigrae,

gracilis, quos vexat, in horto bot. Ticinensi, Papiae, Ital. bor.

APIOSPORA Sacc. — Syll. I p. 539, IX p. 659, XI p. 301, XIV p. 534, XVI p. 477, XVII p. 658, XXII p. 160. — Theiss. et Syd., Ann. Mycol. 13., 1915, p. 419.

1. **Apiospora indica** Theiss. et Syd., Ann. Mycol. 13., 1915, p. 420.— 5319
Stromatibus 1-1,5 mm. long. 180-240 μ lat., rimula anguste lineari dehiscentibus; peritheciis seu loculis minutis, depresse globosis 110-120 μ lat., 80-90 μ altis; ascis clavatis aparaphysatis, 75-100 × 18-24; sporidiis oblique 1-2-stichis, rectis curvulisve, subclavatis, hyalinis, 22-27 μ long., superne 7-9 μ cr., cellula inf. 5-10 μ longa, ad septum non v. vix constrictis.

Hab. in foliis Bambusae sp. (Graminaceae), Wynaad, Ind. orient. (Butler). — *Ap. Montagnei* affinis.

2. **Apiospora carbonacea** Rehm, Ascom. Philippin. VIII, in Leaflt. of 5320
Philippin. Bot. VIII, 1916, p. 2945. — Perithecia gregaria, cortici innata, mox denudata ab eaque ad basim marginata, e lata basi conoidea, breviter papillulata, glabra, atra, carbonacea, 1-1,2 mm. lata, 1 mm. alta; asci cylindracei, 130-12,8-spori-I; sporae cylindraceae, utrinque rotundatae, rectae, hyalinae, inaequaliter 2-cellulares, ad septum non constrictae, cellula superiore 17 μ inferiore 10 μ longa 5 μ lata, hyalinae, distichae, paraphyses filiformes creberrimae 1-2 μ latae.

Hab. ad Schizostachyum (Graminaceae) emortuum in cacumine Mt. Maquiling, Ins. Philipp. (C. F. Baker).— Ab *Apiospora* imprimis peritheciis magnis carbonaceis recedit.

3. **Apiospora Rubi-fruticosi** Severini, Ann. di Botanica v. XI, an. 1913, 532
p. 195. — Peritheciis laxe gregariis seriatis, tectis, globosis, peridermio pustulato innatis, atris, nitidis, brevissime papillulatis, 0,3-0,5 mm. diam.; ascis cylindraceis, subsessilibus, paraphysatis, 140-150 × 9-9,5, octosporis; sporidiis oblique monostichis v. distichis, piriformibus, rectis v. curvulis utrinque acutiusculis, hyalinis, 30-35 × 6-7, prope basim uniseptatis, ad septum vix constrictis, loculo inferiore circiter 9 μ longo.

Hab. in sarmentis Rubi fruticosi (Rosaceae), in silva S. Dominici (Perusia), Italiae Centr.

STIGMOCHORA Theiss. et Syd., Ann. Mycol. 13., 1915, p 580.— Loculi mesophyllo immersi, discreti v. pauci aggregati, clypeo epidermali tecti. Asci paraphysati, octospori. Sporidia hyalina unisep-

tata, loculo inferiore minuto. — Typ. gen.:

1. **Stigmochora controversa** (Starb.) Th. et Syd., l. c., *Apiospora controversa* Starb., Syll. XXII p. 161, *Dothidella controversa* (Starb.) Speg. — Myc. Argent. VI, in Anal. Mus. Nac. Buenos Aires XXIII (1912) p. 95 — *Dothidella? platyasca* Speg. — Syll. XXII, p. 432. — ? *Phyllachora timbo* Rehm — Syll. XIV p. 669. 5322

   Hab. in foliis vivis Pithecolobii scalaris (Leguminosae), S. Lorenzo, Argentina. — Cnfr. Theiss. et Sydow, Ann. Mycol. 13., 1915, p. 560 et 580, tab. IV fig. 2-3, V fig. 7.

2. **Stigmochora Ulei** Syd., Ann. Mycol. 14., 1916, p. 84. — Stromatibus epiphyllis, per superficiem foliorum ex toto vel per magnam partem fuscidule decoloratorum plus minus aequaliter distributis, orbicularibus, 350-400 μ diam., atris, nitidis, conice convexis, unilocularibus; loculis lenticularibus vel applanato-globosis, 200-320 μ latis, 120-160 μ altis, pariete laterali tenui basali parum crassiore, 6-10 μ crasso; clypeo epidermali, 30-40 μ crasso, opaco; ascis fusoideo-clavatis, mucose paraphysatis, 55-70 × 12-17, octosporis; sporidiis 2-3-stichis, oblongis, rectis vel leniter inaequilateris, hyalinis, utrinque lenissime attenuatis, sed apicibus obtusis, totis 18-20 × 5,5-7, loculo infero 4-5 μ tantum longo et lato, haud constrictis. 5323

   Hab. in foliis Pithecolobii lindsaeifolii, Manaos, Rio Negro, Brasilia (E. Ule).

COCCOCHORELLA v. Höhn., Fragm. z. Mykol. X, 1910, n. 500. — Theissen et Sydow, Ann. Mycol. 13., 1915, p. 581. — Stroma totam crassitudinem folii occupans et tunc utrinque visibile, clypeo epidermico tecto, pluriloculare. Asci paraphysati, octospori. Sporidia bilocularia loculo super. majori brunneo, inferiori papilliformi hyalino. — Typ. gen.:

1. **Coccochorella quercicola** (P. Henn.) v. Höhn., *Auerswaldia quercicola* P. Henn., Syll. XVII p. 843. 5324

ENDODOTHELLA Theiss. et Syd., Ann. Mycol., 1915, p. 582. — Stroma ut in *Phyllachora*, paraphyses praesentes; sporidia hyalina bilocularia.

1. **Endodothella Litseae** Racib. in Theiss. et Syd., Ann. Mycol. 13., 1915, p. 588, tab. IV fig. 10. — Stromatibus irregulariter sparsis, ovoideis v. rotundatis 1-2 mm. latis nigris, supra nitidis et depresse convexis, zona viridi-flava usque 2 mm. lata circumdatis, loculis 5-12 in quoque stromate, raro rotundatis plerumque e mutua pres- 5325

sione angulosis, ostiolo rotundato parum distincto praeditis, parietibus parum distinctis limitatis; paraphysibus filiformibus collabescentibus; ascis late cylindraceis, rectis, apice rotundatis, 110-130 × 20-24, octosporis; sporidiis monostichis, ovoideis, utrinque rotundatis, 20-23 × 8-10, bilocularibus, crasse tunicatis, medio non constrictis, loculis inaequilongis, uno 12-15 μ longo, altero 6-8 μ, tunica hyalina v. subgriseola praeditis.

Hab. in foliis Litseae javanicae (Lauraceae), Gedah in ins. Java (Raciborski).

2. **Endodothella dispar** (Syd.) Syd. in Theiss. et Syd., Ann. Mycol. 13., 1915, p. 584, *Dothidella dispar* Syd. in Syd. et Butl., Ann. Mycol. IX, 1911, p. 401. — Stromatibus amphigenis, innatis, utrinque visibilibus, sparsis, rotundatis usque oblongis, minutis, $^1/_5$-$^3/_4$ mm. longis, atris, planis; loculis minutis, paucis; ascis cylindraceis v. clavato-cylindraceis, subsessilibus, octosporis, 45-55 × 9-13, aparaphysatis (?); sporidiis distichis, fusoideis, distincte 1-septatis, haud constrictis, 11-14 × 4, loculis inaequalibus, superiore majore ca. 9 μ longo, inferiore 4-5 μ longo. 5326

Hab. in foliis Andropogonis contorti (Graminaceae), Tellicherry Malabar, Indiae or. (E. J. Butler).

3. **Endodothella Bambusae** (Rabh.) Theiss. et Syd., Ann. Mycol. 13., 1915, p. 585, *Physalospora Bambusae* (Rabh.) Sacc., Syll. I p. 446.— Syn. *Dothidella bambusicola* Syd. et Butl., Ann. Mycol. IX, 1911, p. 401. 5327

Hab. in foliis Bambusae sp. (Graminaceae), Moulmein Burma, Indiae or. (E. J. Butler).

4. **Endodothella Albizziae** (Syd.) Syd. in Theiss. et Syd., Ann. Mycol. 13., 1915, p. 590, *Dothidella Albizziae* Syd., Enum. Philipp. Fungi I, in Philipp. Journ. of Sci. VIII (1913) p. 280. — Stromatibus epiphyllis, sparsis, rotundatis, minutissimis, 0,2-0,5 mm. diam., atris, intus plerumque 1-locularibus, raro 2-locularibus; ascis clavatis, apice rotundatis, 55-75 × 14-19, octosporis; sporidiis oblique monostichis vel distichis, ellipsoideis, utrinque late rotundatis, medio 1-septatis et valde constrictis, primo hyalinis, tandem? dilutissime fuscidulis, 12-16 × 5-6. 5328

Hab. in foliis vivis Albizziae marginatae (Leguminosae), Luzon, Prov. Nueva Ecija, ins. Philipp.

5. **Endodothella Rickii** Theiss. et Syd. Ann. Mycol. 14., 1916, p. 449.— Stromatibus amphigenis, 0,5-1 cm. lat. subrotundis v. irregularibus, minutis, 0,5-1 mm. lat., confluendo amplioribus, saepe nervi- 5329

sequiis nitidulis, 1-pauciloculariibus; clypeo amphigeno 20-30 μ cr. opaco; loculis saepe toto folio immersis, 175-300 × 120-200, pariete atro-brunneo 12-14 μ crasso; ascis paraphysatis, tereti-clavatis, breviter stipitatis, octosporis, 65-80 × 15-18; sporidiis oblique monostichis v. distichis, oblongis v. fusoideis, hyalinis, pro parte 1-locularibus et pro parte obsolete bilocularibus, 20-22 × 5-6.

Hab. in foliis 12-15 ca. long. et 7-8 cm. lat., margine integris et pilosis, Leguminosae indet., Isola S. Francisco, Brasiliae (Dr. Rick).

6. **Endodothella leptosperma** Syd., Ann. Mycol. 14., 1916, p. 85. — Stro- 5330
matibus amphigenis, copiose per folium distributis, irregularibus nervulis limitatis, hinc fere semper angulatis, zonula flavidula cinctis atris, nitidulis, 1,5-4 mm. diam.; clypeo epidermali, amphigeno, 12-20 μ crasso, extenso; loculis numerosis in quoque stromate, applanato-globosis, 180-250 μ latis, 160 180 μ altis, totam folii crassitudinem occupantibus, parietibus brunneis ca. 10 μ crassis; ascis paraphysatis, fusoideis, sessilibus, 45-70 × 9-13, octosporis; sporidiis tristichis, angustissime fusoideis, utrinque attenuatis, rectis vel curvatis, medio 1-septatis, 34-38 × 3.

Hab. in foliis Meliaceae (?), Seringal, S. Francisco, Rio Acre, Brasilia (E. Ule).

7. **Endodothella Picramniae** (Syd.) Syd. in Theiss. et Syd., Ann. Mycol. 5331
13., 1915, p. 590. *Dothidella Picramniae* H. et P. Sydow, Ann. Mycol. XI 1913, p. 266. — Rehm, Ascom. 2073; Sydow, Fungi exot. 134. — Stromatibus in utraque foliorum pagina conspicuis, sparsis orbicularibus, planis, 1-3 mm. diam.; loculis numerosis, minutis, parum prominulis; ascis cylindraceo-clavatis, saepe curvatis, octosporis, 40 55 × 7-10; sporidiis oblique monostichis usque distichis, fusiformibus, utrinque acutis, medio 1-septatis, non constrictis, hyalinis, 14-16 × 3,5-4,5.

Hab. in foliis Picramniae Bonplandianae (Simarubaceae), San Josè, Costa Rica (A. Tonduz).

OLIGOSTROMA H. et P. Sydow, Ann. Mycol. XII, 1914, p. 265 (Etym. *oligos* paucus et stroma). — Stroma in epidermide situm. Perithecia (vel potius loculi) sub epidermide sita, solitaria, globulosa, immersa, pariete bene evoluto, ostiolo haud typico praesente. Asci aparaphysati. Sporidia hyalina vel subhyalina. — Est quasi *Phyllachora* hyalodidyma aparaphysata.

1. **Oligostroma Proteae** Sydow, l. c. p. 265.— Stromate amphigeno, pla- 5332

gulas atras irregulares subinde confluentes 1-5 mm. longas planiusculas efficiente, in epidermide sito, atro; loculis peritheciiformibus solitarie sub epidermide sitis, omnino immersis, sed haud folium penetrantibus, globosis vel ovato-globosis, 100-120 μ diam., pariete bene evoluto, ostiolo haud typico; ascis sessilibus, cylindraceo-clavatis vel clavatis, apice rotundatis, 75-100 × 16-20, aparaphysatis, 4-6-sporis; sporidiis oblique monostichis usque distichis, oblongo-cuneatis, supra medium 1-septatis, non constrictis, totis 24-28 μ longis, loculo superiore breviore sed latiore rotundato vel ovato 8-10 μ longo, 8-9 μ lato, inferiore longiore sed angustiore 15-19 × 6-8, hyalinis vel subhyalinis.

Hab. in foliis Proteae Flanaganii (Proteaceae), Kentani Natal, Africa austr. (Miss Pegler).

Sect. 4. Phaeodidymae

SYMPHAEOPHYMA Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires XXIII (1912) p. 97. — Stromata superficialia, centro papillato-loculigera, ambitu sterilia, fimbriata, atra. Loculi difformes, prominuli, minuti. Asci constipati octospori. Sporidia didyma, fuliginea.

1. **Symphaeophyma subtropicale** Speg., loc. cit., fig. 91.— Maculis amphigenis, repando-angulosis, 1-5 mm., subcallosis, fuscis; stromatibus hypophyllis, superficialibus, atris, opacis, contextu indistincto, ambitu fimbriatis, ex hyphis repentibus radiantibusque, ramulosis, crebre septulatis, fuligineis; loculis 1-10 gregariis in centro stromatis, prominulis, saepius discretis, difformibus, minutis, 120-180 μ diam., astomis, excipulo atro-carbonaceo, nucleo e hyalino olivascente; ascis clavulatis, breviter pedicellatis, 90 × 20, pulpa subgelatinosa superne olivascente immersis; sporidiis leniter subclavulatis, utrinque obtusissimis, medio 1-septato-constrictis, diu hyalinis serius fuligineis, 25-28 × 11-12, loculis subaequalibus, grosse 1-guttulatis. 5333

Hab. in foliis vivis Lucumae neriifoliae (Sapotaceae), prope Bompland, Argentina.

COCCOCHORA v. Höhn., Fragm. z. Mykol. IX, 1909, n. 444, X n. 500.— Theiss. et Syd., Ann. Mycol. 13., 1915, p. 368. — Est *Trabutia* paraphysibus donata, sporidiis phaeodidymis. — Typ. gen.:

1. **Coccochora Kusanoi** (P. Henn.) v. Höhn., l. c., *Dothidella Kusanoi* P. Henn., Syll. XVII p. 850. 5334

2. **Coccochora Rubi** Davis, Parasits Fungi Wisconsin, V, Trans. Wisc. Ac. of Sc. etc. XIX, 1919, P. II, p. 696. — Stromatibus epiphyllis sparsis, nigris, nitidis, prominentibus, suborbicularibus, subcuticularibus 0,25-1 mm. diam.; loculis 1-v. plurimis 40-60 μ altis 60-90 μ latis, apice dehiscentibus; ascis cylindraceis plus v. minus curvis, 45-50 × 7-9, octosporis; sporis brunneis, oblongo-clavatis, sub medio septatis, non constrictis, 11-15 × 4-6; paraphysibus filiformibus inconspicuis. 5335

Hab. in foliis Rubi hispidi (Rosaceae), Millston, Wisconsin, Amer. boreali.

THYRIOPSIS Theiss. et Syd., Ann. Mycol. 13., 1915, p. 369. — Stroma subcuticulare, tectum, supra carbonaceum, intus totum molliusculum laeticolor fibrosum, hypothecio homogeno; loculis immersis; ascis aparaphysatis octosporis; sporidiis phaeodidymis. — Typ. gen.:

1. **Thyriopsis halepensis** (Cooke) Theiss. et Syd., l. c. p. 369, *Dothidea halepensis* Cooke, Syll. II p. 642. — Huc ducendum est *Dothiclypeolum pinastri* v. Höhn. nov. gen. et sp. in Jaap « Fungi sel. exsicc. » n. 742, an. 1915; Verh. bot. Ver. Prov. Brandb. 59., 1917, p. 29. Cnfr. Theissen et Sydow, Ann. Mycol. 15., 1917, p. 433. 5336

PHAEODOTHIOPSIS Theiss. et Syd., Ann. Mycol. 12., 1914, p. 192; 13., 1915, p. 410. — Stroma inter epidermidem et mesophyllum positum, clypeo epidermali tectum. — Typ. gen.:

1. **Phaeodothiopsis Zollingeri** (Mont. et Berk.) Th. et Syd., l. c., *Dothidella Zollingeri* (Mont. et Berk.) Sacc., Syll. II, p. 632. — Etc. 5337
2. **Phaeodothiopsis Eupatorii** F. L. Stevens, Bot. Gazette 69., 1920, p. 252, tab. XIV fig. 16-17. — Maculis clypeum non excedentibus; stromatibus numerosis, rotundatis, 1-4 mm. diam., nigris ob perithecia rugosis, plerumque epiphyllis, primum epidermicis demum subepidermicis et in mesophyllo evolutis; loculis rotundatis v. lenticularibus 100-250 μ diam., 80 μ altis; ascis cylindraceis circ. 110 × 17, octosporis, inordinatis; sporidiis uniseptatis, loculis inaequalibus, maturitate brunneis, 20 × 7; paraphysibus filiformibus ramosis. 5338

Hab. in foliis Eupatorii portoricensis (Compositae), Dos Bocas prope Utuada, Porto Rico.

3. **Phaeodothiopsis Stryphnodendri** (P. Henn.) Th. et Syd., l. c., *Dothidea Stryphnodendri* P. Henn., Hedw. vol. 48. (1908) p. 9. — Stromatibus epiphyllis, erumpenti-superficialibus, gregariis, pulvinatis, rugulosis, atro-carbonaceis, 0,5-1 mm. diam.; loculis immersis, globulosis, fu- 5339

scis, obtuso-ostiolatis; ascis cylindraceis, vertice obtuse rotundatis, octosporis, 45-55 × 4-6; sporidiis oblique monostichis, ellipsoideis, utrinque rotundatis, medio 1-septatis, constrictis, fuscis, 9-10 × 4-5.

Hab. in foliis Stryphnodendri Barbatiani (Leguminosae), Morro Pellado, S. Paulo, Brasilia.

4. **Phaeodothiopsis Pterocarpi** H. S. Jates, F. from Brit. N. Borneo, in Philipp. Journ. of Sc. Bot. v. 13., 1918, p. 237. - Stromatibus epiphyllis, numerosis ca. 0,5-1,5 mm. diam., dispersis, carbonaceis, hemisphaerico-pulvinatis, laevibus, atris, in maculis fuscidulis, 2-3 mm. diam. dispositis; loculis ca. 6-12, 80-120 μ diam., globosis; ascis cylindraceis, 50-60 × 10, 8-sporis, paraphysatis; sporidiis distichis, oblongis, utrinque rotundatis, brunneis, ad basim 1-septato-constrictis, cellula superiore 10 × 12,5 inferiore 3-4 × 3. 5340

Hab. in foliis Pterocarpi indici (Leguminosae), Tenom, in ins. Borneo bor. — Socia *Meliola Pterocarpiae* Yat.

PHAEODOTHIS Syd. — Syll. XVII p. 854, XXII p. 436.

1. **Phaeodothis Gigantochloae** Rehm, Ascomyc. Philipp. V, Leaflets of Philipp. Botany, VI (1914) p. 2223. — Stromatibus culmo innatis, convexis, orbicularibus vel ellipsoideis, 1-3 mm. longis, 1,5 latis, 1 mm. altis, extus fusco-inquinatis, intus fulvo-rubidulis, papillulis nullis conspicuis; loculis 6-8, monostichis, globulosis, 100 μ diam., arcte congregatis, tenuissime membranaceo-contextis; ascis ellipsoideis, demum cylindraceis, octosporis, aparaphysatis; sporidiis distichis, fusiformibus, utrinque acutatis, medio septatis constrictisque, subfuscis, 15-18 × 5-6. 534

Hab. in culmo Gigantochloae emortuo (Graminaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (C. F. Baker). — Sec. Theiss. et Syd., Ann. Mycol. 13., 1915, p. 185 et p. 598 ad Sphaeriaceas pertinet et potius ut syn. *Rhopographi hysterioidis* (Ces.) Sacc. et *Didymosphaeriae striatulae* Penz. et Sacc. habendum.

2. **Phaeodothis Tristachyae** P. et H. Syd., Ann. Mycol. X, 1912, p. 41. — Stromatibus amphigenis, sparsis v. paucis seriatis, oblongis v. linearibus, 0,5-1 mm. long., planis, atris, opacis, innatis; loculis numerosis, minutis, 100-150 μ diam.; ascis cylindraceis, apice obtusiusculis, 45-70 × 6-12, octosporis, paraphysibus numerosis filiformibus obvallatis; sporidiis monostichis usque distichis, fusiformibus, medio 1-septatis, non v. parum constrictis, olivacco-brunneis, 12-13,5 × 3-4, quaque cellula 1-2 guttulata. 534

Hab. in foliis Tristachyae leucothricis (Gramina-

ceae), Mooi River, Natal (J. B. Davy). — *Phaeod. Tricuspidis* Syd. proxima sed differt stromatibus sporidiisque minoribus.

3. **Phaeodothis sparsa** Petch, Ann. R. Bot. Gard. Peradeniya, v. VI, P. III, 1917, p. 227. — Maculis parvis, flavis; stromatibus epiphyllis, saepius solitariis, irregulariter ovalibus, 0,5-0,9 × 0,3-0,4 mm., pulvinatis, 2-4-locularibus, ostiolis inconspicuis; ascis clavatis, octosporis, parte sporifera 40-60 × 9-10; sporidiis oblongo-ovoideis, truncatis, inaequaliter uniseptatis, non constrictis, fusco-viridibus, 8-10 × 4-5; conidiis nigris, lenticularibus, rotundatis vel angulatis 4-5 μ diam. 5343

Hab. in foliis Acaciae caesiae (Leguminosae), Peradeniya, Ceylon.

4. **Phaeodothis Apuleiae** Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires XXIII (1912) p. 95. — Maculis nullis sed foliis ad hypophyllum bulloso-concaviusculis; stromatibus epiphyllis, laxe gregariis, suborbicularibus, 0,5-2 mm. diam., verruculosis, atris, opacis, 3-10-loculigeris; loculis valde prominulis, minutis, subglobosis, 120-150 μ diam., astomis, irregulariter dehiscentibus; ascis e cylindraceo subclavulatis, breviuscule attenuato-pedicellatis, aparaphysatis, 60-70 × 12-18; sporidiis recte distichis vel oblique monostichis, subobovatis, utrinque subtruncatis, parum infra medium 1-septatis, non vel vix constrictis, fuligineis, 11-12 × 6, loculis inaequalibus, superiore longiore, crassiore obtusioreque, grosse 1-guttulatis. 5344

Hab. in foliis vivis Apuleiae praecocis (Leguminosae), prope Bompland, Argentina.

5. **Phaeodothis polystoma** Sydow, Ann. Mycol. 18., 1920, p. 101. — Stromata epiphylla, maculis brunneolis subtus centro sordide albidis insidentia, orbicularia vel ambitu irregularia, 3-5 mm. diam., atra, parum elevata, superficie ob loculos copiosos dense dispositos undulata, parum nitentia; loculi copiosissimi, 150-200 μ alti, 180-220 μ lati, fere totam folii crassitudinem occupantes, pariete brunneolo ubique evoluto 18-22 μ lato; clypeo tantum epiphyllo 25-30 μ crasso; asci cylindracei, 80-90 × 11-15, stipitati, octospori, paraphysati; sporae distichae, oblongae, intense olivaceo-fuscae, 1-septatae medio non vel parum constrictae, 18-22 × 3,5-5. 5345

Hab. in foliis Derridis spec. (Leguminosae), Mt. Maquiling, prov. Laguna, Ins. Philippin. (T. Collado).

6. **Phaeodothis Grovei** Sacc., Notae Mycol. XX, Nuovo Giorn. Bot. it. 23., 1916, p. 223. — Stromatibus epiphyllis, subcircularibus, gre- 5346

gariis, 1,5-3 mm. diam. irregulari-subcircularibus, saepe confluentibus, innato-erumpentibus, applanatis, membranaceo-carbonaceis, intus nigris, extus atro-nitentibus, ex loculis prominulis creberrimis (sub vitro) punctulatis; loculis 40-50 in quoque stromate, globulosis, 40-50 μ diam., subastomis, rarius subumbilicatis; stromatis contextu parenchymatico fuligineo; ascis obovatis, dein breviter oblongis, apice rotundatis, basi obtuse tenuatis, subsessilibus, 35-45 10-14, primo muco obvolutis; sporidiis 2-3-stichis, oblongis, utrinque rotundatis, medio constricto-1-septatis, guttulatis v. nubilosis, 14-16 ≈ 6, olivaceis.

Hab. in foliis subvivis Kennedyae sp. (Leguminosae), Australia occid. (communicavit W. B. Grove).

7. **Phaeodothis cladonema** (Wedd.) Theiss. et Syd., Ann. Mycol. 13., 534
1915, p. 597, *Buellia cladonema* Weddell, Lich. de Agde, p. 20, *Dothidea cladonema* (Wedd.) Vouaux, Bull. Soc. Mycol. Fr. 1912, p. 195. — Stromatibus lenticularibus valde applanatis, 0,2-1,2 mm. diam., immersis, saepe confluentibus; pseudoperitheciis ostiolatis 50-100 μ diam.; ascis cylindraceo-clavatis, breviter crasseque pedicellatis, octosporis, 44-63 ≈ 10-14; paraphysibus e basi valde ramosis, septatis, hyalinis 1,25-1,5 μ cr., cellula majori obscuriori terminatis; sporidiis distichis v. infra monostichis, brunneis, uniseptato-constrictulis, ovoideo-elongatis, loculo inferiori angustiori, 12-16 ≈ 5-6.

Hab. in thallo Parmeliae Delisei (Lichenes), Adge Herault Gallia (Weddell et A. De Crozals). — A *Doth. Lichenum* stromatibus immersis depressis praecipue differre videtur.

Sect. 5. Hyalophragmiae

CAMAROTELLA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 370 (Etym.. a *kamarotos* incurvatus). — Hypostroma epidermicum, hypothecium obscurum; paraphyses praesentes, sporidia hyalina quadrilocularia; caeterum ut in *Trabutia*. — Typ. gen.:

1. **Camarotella Astrocaryae** (Rehm.) Theiss. et Syd., l. c., cum icon. 53
Montagnella Astrocaryae Rehm, Syll. XIV p. 682.

PHRAGMOCAUMA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 411. — Est *Catacauma*, paraphysata, sporidiis hyalinis quadrilocularibus donata. — Typ. gen.:

1. **Phragmocauma viventis** (Cke.) Th. et Syd., l. c., *Phyllachora viventis* (Cke.) Sacc., Syll. II p. 601. — Syn. *Homostegia Albizziae* (Cke.) Berl. et Vogl., Syll. IX p. 1049. 5349

2. **Phragmocauma Kolowratiae** Syd., Ann. Mycol. 15., 1917, p. 225.— Stromata epiphylla, sparsa, discreta, 2-4 mm. diam., orbicularia vel suborbicularia, nitidula leniter convexa, stromate parco sterili saepe in hypophyllo evoluto, loculi numerosi in quoque stromate, 100-160 μ lati et alti; clypeo opaco aterrimo 20-25 μ crasso, parietibus lateralibus 10-12 μ crassis brunneis; asci cylindracei vel cylindraceo-clavati, breviter stipitati, 8-spori, 90-115 × 10-15, parce paraphysati; sporae plerumque distichae, fusoideae, 3-septatae, non constrictae, 22-26 × 4,5-5, quaque cellula guttulata, hyalinae. 5350

Hab. in foliis Kolowratiae elegantis (Zingiberaceae), prov. Rizal Luzon, Ins. Philipp. (H. S. Jates).

SCIRRHOPHRAGMA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 423. — Stroma ut in *Scirrhia;* paraphyses praesentes; sporidia hyalina trilocularia. — Typ. gen.:

1. **Scirrhophragma regalis** Th. et Syd., l. c.— Stromatibus copiosis caulicolis elongatis, linearibus, 1-2 mm. long. 200 μ cr., epidermidem demum nigricantem elevantibus; stromate in cortice evoluto ex hyphis parallele dispositis septatis brunneo-olivaceis 6-7 μ cr. efformato supra a clypeo opace-nigro tecto; loculis rotundatis longitudinaliter seriatis, 150-170 μ diam., parietibus propriis destitutis; ascis parietalibus cylindraceis, breviter pedicellatis 80-90 × 8-9; paraphysibus copiosis tenuissimis; sporidiis distichis, hyalinis, elongatis 3-locularibus, 14-16 × 4, utrinque rotundatis, loculis inaequalibus praeditis. 5351

Hab. in caulibus Osmundae regalis (Filices), Sperenberg in Brandenburgia, Germania (H. Sydow).

EXARMIDIUM Karst. — Syll. II, p. 648 (ut subgenus). — Theiss. et Syd., Ann. Mycol. 13., 1915, p. 424.

1. **Exarmidium blumeanum** (Rehm) Th. et Syd., Ann. Mycol. 13., 1915, p. 425, *Rhopographus blumeanus* Rehm, Ascomyc. Philipp. IV, Leaflets of Philipp. Botany VI (1913) p. 1936. — Stromatibus in cortice culmi primitus areolatis, 2 mm. circ. latis, mox lineariter confluentibus, deniqne connatis, cortice longe lateque nigrofuscata innatis; peritheciis monostichis, areolatim 10-12 arcte congregatis, globulosis, 100 μ diam., peridermio mox semiglobose dein lineariter 5352

1 mm. longe elato, hyalino obtectis, demum eo laciniatim perrupto denudatis; ascis fusiformibus, octosporis, 80-100 × 10-12; paraphysibus filiformibus, hyalinis, septatis, 2 μ cr.; sporidiis parallele dispositis, elongato-fusiformibus, apice superiore obtuso, inferiore subacuto, rectis, 7-9-septatis, guttulatis, hyalinis, 55 × 2,5-3.

Hab. in Bambusa blumeana (Graminaceae) emortua, Luzon, Prov. Laguna, Los Baños, ins. Philipp. (S. A. Reyes).

2. **Exarmidium Paolii** Baccarini, Eumyc. Somalia it., in « Missione Ste- 53
fanini-Paoli » Firenze 1916, p. 196. — Stromatibus superficialibus in ligno decorticato insidentibus prominulis ac lineariter colliculosis; ad 3 ad 6 mm. et ultra longis, ad 1 mm. latis, gregariis ac saepe confluentibus; loculis uniseriatis 39-96 μ latis 39,2 μ crassis; ascis obovatis, sessilibus, paraphysatis, 12 × 25; sporis cylindrico-ellipsoideis, 11,2 × 3,3, primitus continuis denique triseptatis hyalis, quaternis (?)

Hab. in ligno emortuo decorticato, Solàgle, et Bur Eghérta, socia *Gloniopsis somala*, Somalia it., Africae trop. (Paoli).

RHOPOGRAPHELLA P. Henn. — Syll. XVII p. 858 (ut subg.), XXII p. 440. — De hoc gen. cnfr. Theissen et Sydow (Ann. Myc. 13., 1915, p. 428). Typus gen. *Rh. Gaduae* P. Henn. (Syll. XVII p. 858) sec. v. Höhnel (Fragm. 615) ad *Calosporam* pertinet (Valsaceae), nec non *Rh. Gynerii* P. Henn., *Rh. clavisporus* (C. et Pk.) Sacc. et *Rh. Taquarae* Rehm.

1. **Rhopographella reyesiana** Rehm, Ascomyc. Philipp. V, Leaflets of 53
Philipp. Botany, VI (1914) p. 2224.— Stromatibus plurimis innatis, plerumque arcte parallelis, interdum subcurvatis, 0,5-2 cm. longis, 1 mm. latis, peridermium striiformiter elatum longitudinaliter rimose perforantibus, extus intusque nigris, ostiolis minimis demum conspicuis; loculis plurimis monostiche innatis, globulosis, tenuissime parenchymatice contextis, 120 μ latis; ascis clavatis, apice rotundatis, octosporis, 50 × 10; paraphysibus non conspicuis; sporidiis oblongo-fusoideis, utrinque acutatis, rectis, 1-dein 3-septatis, guttatis, non constrictis, hyalinis dein fuscidulis (mens. desunt).

Hab. in culmo emortuo Bambusae blumeanae (Graminaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (S. A. Reyes). — Intra rimas corticis hyphae torulosae fasciculatae, rectae, obtusae, septatae, fuscae progrediuntur.

— var. **Gigantochloae** Rehm, loc. cit. — Stromatibus primitus plerumque orbicularibus, minus arcte regulariter parallelis et striiformiter

seriatis, 0,5-1 mm. latis, ostiolis perspicue prominentibus, paraphysibus filiformibus.

Hab. in Gigantochloa (Gramin.), cum praecedente.—*Rhopographus hysterioides* (Ces.) Sacc., Syll. II p. 648, ad calamos Bambusae, descriptione hymenii plane carens, ceterum simillimus videtur.

2. **Rhopographella Ochlandrae** Petch, Ann. R. Bot. Gard. Peradeniya, v. VI, P. III, 1917, p. 228. — Stromatibus maculis flavis congregatis, saepius hypophyllis, erumpentibus, nigris, rugosis, pulvinatis, perithecis interdum subprominentibus, ostiolis non prominentibus; perithecis circa 0,1 mm. diam., 2-3 in quoque stromate; ascis late clavatis vel ovalibus, pariete crasso, 4-(?) sporis; sporis parallelis, fusoideis vel subcymbiformibus, hyalinis, triseptatis, 28-36 × 3; paraphysibus linearibus, flexuosis, brevibus; pycnosporis hyalinis falcatis, vel varie curvatis, triseptatis, 32-70 × 3. 5355

Hab. in foliis vivis Ochlandrae stridulae (Graminaceae), Gikiyanakande, Ceylon.

TELIMENA Rac. — Syll. XVI p. 631.

1. **Telimena Panici** Theiss. et Syd., Ann. Mycol. 13., 1915, p. 600.— Stromatibus crebre sparsis, parvis, utrinque visibilibus, opace nigris, prominulis, ostiolis hypophyllis praeditis, ovato-ellipsoideis, superfice zigrinata ostiolata; loculis parum numerosis, globosis, 140 170 μ diam., folium percurrentibus, supra et infra clypeo epidermoidali effuso tectis; ascis cylindraceis, sparse paraphysatis, breviter pedicellatis, 48-52 × 7-8, octosporis; sporidiis plerumque distichis, elongatis, utrinque parum angustatis non acutatis, quadrilocularibus, hyalinis, 11-13,5 × 3, loculis mediis plerumque brevioribus. 5356

Hab. in foliis Panici patentis (Graminaceae), Luzon, prov. Laguna, Ins. Philipp. (Merrill). — Sydow, Fungi exot exs. n. 266 sub *Phyll. stenospora* (B. et Br.) Sacc.

2. **Telimena graminella** H. et P. Sydow, Ann. Mycol. XII, 1914, p. 565.— Stromatibus in utraque foliorum pagina conspicuis, omnino innatis, phyllachoroideis, sparsis, ellipticis vel oblongis, 1-2,5 mm. longis, 1 mm. latis, atris, opacis, minute plurilocularibus; ascis cylindraceis, ad apicem obtusis, 65-100 × 8-11, octosporis; paraphysibus paucis, sed distinctis, hyalinis, filiformibus, 1 μ crassis; sporidiis distichis, exacte fusiformibus, utrinque attenuatis, rectis vel leniter curvatis, hyalinis, 3-septatis, guttulatis, 20-25 × 4-5, loculis extimis quam duobus interioribus duplo vel triplo longioribus. 5357

Hab. in foliis Paspali sp. (Graminaceae), Angat prov. Bulacan, ins. Philippin. (M. Ramos).

3. **Telimena Bakeri** Syd., Ann. Mycol., 15., 1917, p. 228. — Stromata 53
folio saepe late decolorato innata, sparsa vel pauca striaeformiter collecta, saepe etiam in macula minuta flavida solitarie evoluta, epiphylla, parum prominula, elliptica, atra, minutissima et $^1/_2$ mm. diam., usque 1,5 mm. longa, opaca, loculos 1-3 includentia in hypophyllo etiam conspicua; asci cylindraceo-clavati, paraphysati, 70-90 × 12-14, octospori; sporae oblique monostichae vel distichae, fusoideae, utrinque acutae, rectae, 3-septatae, non constrictae, 24-28 × 4-7, hyalinae.

Hab. in foliis Schizostachyi sp. (Graminaceae), in summo vertice Mt. Maquiling Laguna, Ins. Philipp. (C. F. Baker).

4. **Telimena encaustica** (Nyl.) Theiss. et Syd., Ann. Mycol. 13., 1915, 53
p. 599, *Homostegia encaustica* (Nyl.) Vouaux, Bull. Soc. Mycol. Fr. 1912, p. 197, *Epiphora encaustica* Nyl. in Flora, 1876, p. 238. — Stromatibus maculis nigris superficialibus simulantibus, demum plus minus effusis, 200-600 μ crassis e contextu hyphenchymatico efformatis, crebre ostiolatis; peritheciis plerumque bistratosis, subsphaeroideis, 140-230 μ diam.; ascis clavatis pedicello longiusculo noduloso praeditis, apice rotundatis, tunica crassa praeditis, octosporis, 63-82 × 13,5-16; paraphysibus numerosis, multiguttulatis, hyalinis filiformibus, parum septatis, ramosis, quandoque anastomosantibus, ascos longitudine superantibus, 1,5 μ cr.; sporis distichis v. tristichis, elongato-fusoideis, utrinque plus minusve acutatis sed etiam obtusis, rectis v. leniter curvulis, hyalinis v. leniter flavidulis triseptatis, ad septa constrictulis vel non, 22-30 × 3-5.

Hab. in thallo et apotheciis Parmeliae encaustae (Lichenes), Mont-dore, Gallia (Lamy).

PHRAGMOCARPELLA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 601.— Est *Phyllachora* sporidiis hyalinis quadrilocularibus, acutis v. obtusis, paraphysibus carenti. — Typ. gen.:

1. **Phragmocarpella Ichnanthi** (P. Henn.) Th. et Syd., l. c., *Roumegueria* 53
Ichnanthi P. Henn., Syll. XXII p. 437.
2. **Phragmocarpella Puiggari** (Speg.) Th. et Syd., l. c., *Montagnella? Puig-* 53
gari Speg., Syll. IX p. 1048.
3. **Phragmocarpella fusispora** (Syd.) Syd. in Th. et Syd., l. c., *Homostegia* 53
fusispora Syd., Syll. XXII p. 441.

Sect. 6. Phaeophragmiae

DERMATODOTHIS Racib. in Theiss. et H. Sydow, Ann. Mycol. XII. 1914, p. 280; 13., 1915, p. 369. — Stroma *Trabutiae* inter cuticulam et epidermidem. Asci paraphysati octospori. Sporae brunneae, triloculares.

1. **Dermatodothis javanica** Racib. in Theiss. et H. Sydow l. c. p. 280. — 5363
Stromatibus epiphyllis, carbonaceis, depressis, rotundatis, 1-2,5 mm. latis, inter cuticulam et epidermidem efformatis; perithecis semilenticularibus, 120-150 μ altis usque 300 μ latis, in stromate immersis, ostiolo punctiformi prominulo praeditis; paraphysibus filiformibus; ascis linearibus apice rotundatis 70-85 μ long. 8-10 μ latis, octosporis; sporidiis elongato-ovoideis 12-14 × 3,5-4, transverse biseptatis et tunc trilocularibus, apice rotundatis, ad septa indistincte constrictis, levibus, dein pallide brunneis. Stratu pycnidico (*Hendersonia*) saepe eodem stromate consociato sed pycnidiis magnitudine minoribus; sporulis ovoideis trilocularibus, 7-9 × 3-4, ad septa constrictis, apice sporophororum singulis ortis.

Hab. in foliis Symplocei sp. (Symplocaceae), ad Pangerango supra Tjitjuruk, in ins. Java.

RHOPOGRAPHUS Nits. — Syll. II p. 647, XI p. 378, XVI p. 630, XVII p. 857. — Theiss. et Syd., Ann. Mycol. 13., 1915, p. 425.

1. **Rhopographus pusillus** Spegaz., Rel. Myc. trop. etc. in Bol. Ac. Nac. 5364
Cienc. Cordoba, t. 23., 1919, Extr. p. 132. — Stromata pusilla 100-150 × 75-100 parenchymate innata ad epiphyllum plus minusve prominulo-manifesta, dense gregaria saepeque confluentia, atra glabra opaca, rimose dehiscentia, loculis difformibus pulpa alba farctis; ascis ellipticis breviter crasseque pedicellatis aparaphysatis, 30-32 × 10-15; sporis fusoideis utrinque acutiusculis, 3-septatis, 16-22 × 3-4.

Hab. ad ramos emortuos? Ilicis cujusdam (Aquifoliaceae), Apiahy, Brasilia (J. Puiggari).

RHOPOGRAPHINA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 429. — Est *Rhopographus* paraphysibus destitutum; sporidiis pallidioribus. — Typ. gen.:

1. **Rhopographina Chamaemori** (Rostr.) Th. et Syd., l. c., *Rhopographus* 5365
Chamaemori Rostr., Syll. XVII p. 857.
2. **Rhopographina Palmarum** (v. Höhn.) Th. et Syd., l. c., *Rhopographus* 5366

Palmarum v. Höhn., Fragm. zur Mykol. 775, in Stzgsb. Akad.Wiss. Wien CXXI, 1., p. 393, fig. 3 (1912). — Stromatibus elongatis, 200-300 × 120, epidermidem pustulatim inflantibus, in maculis minutis brunneis indistincte limitatis et saepe confluentibus gregariis, 1-locularibus, lateraliter rimose dehiscentibus; contextu stromatis minute parenchymatico, brunneo; ascis sessilibus, late clavatis, sursum rotundatis crasseque tunicatis, 35-54 × 16-20; paraphysibus diffluentibus, gelatinosis, epithecium crassum hyalinum efformantibus; sporidiis polystichis, oblongo-clavulatis, 5 6-septatis, diu hyalinis dein luteis demumque brunneis, 15-19 × 5-6, strato tenui mucoso obductis.

Hab. in foliis vivis Phoenicis natalensis, Tjibodas, Java (Rehm, Ascomyc. exs. n. 1944 sub *Monographus Palmarum*) — Species incertae sedis, ad *Gloniellam* vergens.

HOMOSTEGIA Fuck. — Syll. II p. 649, IX p. 1049, XIV p. 683, XVI p. 631, XVII p. 857, XXII, p. 440.

1. **Homostegia Durionis** Racib. in Theiss. et Syd., Ann. Mycol. 13., 1915, 536
p. 606. — Stromatibus rotundatis, nigris, in mesophyllo efformatis, 1-1,2 mm. latis, inter se 2-3 mm. remotis, vel usque 1-10 cm. rotundato-gregariis, in epiphyllo praecipue conspicuis, nitidis; loculis 2-4, depresse globosis raro globosis 110-130 μ alt., 115-240 μ latis, in epiphyllo minute ostiolatis, parietibus parum evolutis; paraphysibus filiformibus; ascis cylindraceo-clavatis, octosporis, 86-98 × 16; sporidiis distichis, elongato-ovoideis, 28-32 × 7, rectis v. curvulis, quadrilocularibus, parietibus brunneolis juventute levibus demum minute verrucosulis.

Hab. in foliis Durionis zibethini (Bombacaceae), prope Buitenzorg, Java (Raciborski).

2. **Homostegia parasitica** Rehm, Ascom. n. 894, Hedw. 1887, p. 16 extr., 53
Syll. IX p. 1050, Ann. Mycol. 13., 1915, p. 134 (diagn. ampliata). — Stromatibus superficialibus, nigris, applanatis, ambitu subcircularibus, 0,5-1 mm. diam., sed saepissime ob confluentiam angulatis, intus minute monostiche plurilocellatis, crebre minutissimeque ob ostiola punctulatis; ascis clavatis breviter crasseque stipitatis, 45-50 × 9-11, octosporis, filiformi-paraphysatis; sporidiis distichis v. oblique monostichis, ellipsoideo-oblongis, utrinque acutulis, 14-16 × 4,5-5, initio biseriatim guttulatis, dein 5-septatis non constrictis, ex olivaceo subhyalinis.

Hab. ad ramos decorticatos putres Corni sanguineae, parasitica in *Eutypae latae* stromate, prov. Rigny, Galliae (J. Flageolet). — Specimina Flageoletiana optime evoluta cum diagnosi Rehmiana bene congruunt, non vero cum diagnosi *Bertiae parasiticae* H. Fabre quae fungus simplex est et non nisi loco convenit. (P. A. Sacc. in mns.).

3 **Homostegia Pterocarpi** Har. et Pat. in Bull. Mus. Hist. Nat. Paris 1911, p. 368. — Epiphylla; stromatibus carbonaceis, pseudoparenchymaticis, in macula rufescente siccata sparsis, exiguis, 0,5 mm. circ. diam., convexis, initio nitidis, bullatis (loculis 1-2 in stromate singulo), fragilibus, facile friabilibus, nucleo brunneo, vix ostiolorum ope punctatis; nucleo ascis efformato subcylindricis, apice obtusis, basi attenuatis, 50 × 8-10; sporidiis octonis biseriatis cuneiformi-cylindraceis, uno apice vix attenuatis, utrinque rotundatis, fuscis, transverse biseptatis, 10 × 4; paraphysibus indistinctis. 5369

Hab. in foliis Pterócarpi erinacei (Leguminosae), Chari: Gribingui, Congo gallico. — Species critica de qua cnfr. Theiss. et Syd., Ann. Mycol. 13., 1915, p. 608.

4. **Homostegia parmeliana** (Jacz. et Elenkin) Vouaux, Bull. Soc. Mycol. 1912, p. 198, *Trematosphaeriopsis parmeliana* (Jacz.) Elenk., Lichens facultatifs p. 10 (rossice). — Stromatibus in thallo amphigenis nigris primum punctiformibus dein pulvinatis et 2 mm. diam. et ultra, parum depressis, contextu plectenchymatico; pseudoperitheciis immersis, ovoideis, piriformibus v. subsphaeroideis ostiolo simplici praeditis; ascis cylindricis, stipitatis, octosporis, 80-85 × 16-20; paraphysibus filiformibus numerosis; sporidiis distichis subhyalino-flavidulis, fusoideis, triseptatis, rectis v. curvulis, 30 × 6-8. 5370

Hab. in thallo Parmeliae molliusculae var. vagantis (Lichenes), Rossia (Elenkin). — Cnfr. etiam Theiss. et Syd., Ann. Mycol. 13., 1915, p. 604.

5. **Homostegia lophiostomacea** (Rehm) Theiss. et Syd., Ann. Mycol. 13., 1915, p. 606, *Auerswaldia* (*Phaeochora*) *lophiostomacea* Rehm, Ascomyc. Philipp. VI, Leaflts. of Philipp. Bot. v. VI, 1914, p. 2274. — Stromatibus cortice late atrato gregarie innatis eoque obtectis, parallelis, forma *Lophiostomatis* innatis, anguste ellipsoideis, fere linearibus, 0,5 mm. longis, peridermium protuberantibus, medio paullum superantibus, vix disrumpentibus; loculis in stromate binis arcte congregatis, 150 μ latis, ostiolis non conspicuis; ascis clavatis, apice rotundatis, 90-120 × 20, paraphysibus?; sporidiis fusiformibus, utrinque acutatis, medio septatis, paullulo constrictis, rectis, cinereo-fu- 5371

scidulis, 30 × 6-8.

Hab. in petiolo emortuo Arengae sacchariferae (Palmae), Los Baños, ins. Philipp. (S. A. Reyes). — Ex subgen. *Phaeochora* v. Höhn.

6. **Homostegia Symploci** Racib. in Syd. et Theiss., Ann. Mycol. 13., 1915, p. 606. — Stromatibus numerosis, irregulariter distributis, rotundatis, 1-2,5 mm. latis, rubro-nigris, macula nulla limitatis; loculis confertis depresse globosis, 160-210 μ latis 120-140 μ altis, minute vix prominenter ostiolatis; ascis cylindraceis, octosporis, 85-104 × 11-14; sporidiis fusoideis, quadrilocularibus, utrinque lanceolato-acutatis, medio constrictulis, levibus, parietibus brunneis praeditis, 16-21 × 4-5.

Hab. in foliis Symploci sp. (Symplocaceae), Djasinga prope Buitenzorg, Java (Raciborski).

CLYPEOSTROMA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 609. — Est *Phyllachora*, paraphysibus destituta, sporidiis quadrilocularibus coloratis donata. — Typ. gen.:

1. **Clypeostroma hemisphaericum** (Berk.) Theiss. et Syd., Ann. Mycol. 13., 1915, p. 609, *Dothidea hemisphaerica* Berk., Syll. II p. 643, Syn. *Cocconia discoidea* (C. et M.) Sacc., Syll. X p. 50.

Sect. 7. Dictyosporae

DICTYOCHORA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 610. — Est *Phyllachora* paraphysibus destituta, sporidiis brunneis muralibus. — Typ. gen.:

1. **Dictyochora Rumicis** (Karst.) Th. et Syd., Ann. Mycol. 13., 1915, p. 610, *Dothidella Rumicis* (Karst.) Sacc., Syll. II p. 630.
2. **Dictyochora Gambellii** Ch. F. Fairman, Mycologia 10., 1918, p. 106. — Stromatibus primum subepidermicis dein hysteriformiter erumpentibus caulicolis longitudinaliter distributis; loculis 2-9 aggregatis rotundatis v. mutua pressione subangulosis, nigris, 150-470 μ diam.; ascis clavato-cylindraceis, breviter stipitatis, 100 × 10-12; paraphysibus nullis; sporidiis oblique monostichis v. supra subdistichis, 5-7 septatis ad septa constrictulis, loculis terminalibus plerumque simplicibus, mediis muriformibus, fusoideo-oblongis, brunneo-flavescentibus dein opacis, 20-27 × 7-10.

Hab. in caulibus emortuis Zeae Maydis, «Gambel farms», N. Y. Amer. bor.

DICTYOCHORELLA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 610 (Etym. *dictyon* rete, cribrum, et *achor* ulcus). — Est *Dictyochora* paraphysibus praesentibus.

1. **Dictyochorella abscondita** Theiss. et Syd., l. c. p. 610. — Loculis folio omnino immersis, clypeo 400-450 μ lato praeditis, indistincte ostiolatis; clypeo supra 20-25 μ infra 20-22 μ cr., parietibus lateralibus loculorum tenuibus; loculis 320-380 μ latis 260-300 μ alt.; ascis cylindraceis, breviter pedicellatis, p. sp. 82 × 10 13, paraphysibus filiformibus praeditis, octosporis; sporidiis monostichis v. distichis, pallide brunneis, 6-7 locularibus, medio constrictis, 22-24 μ long. supra medium 10 μ latis, infra 8-9 μ, utrinque rotundatis. 5376

Hab. in foliis Compositae scandentis cujusdam, S. Francisco, Brasilia. — Socia *Lizonia aequalis*.

Sect. 8. Scolecosporae

OPHIODOTHELLA v. Höhn. - Sacc., Syll. XVII p. 859 (ut subgenus). — *Microphiodothis* Spegaz., Rel. Mycol. trop. etc. in Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 133 (Etym. a *micron* parvum et *Ophiodothis* quia simile). — Stromata parvula unilocularia biophila innata, atra, coriaceo-subcarbonacea; loculi parietibus propriis destituti; asci octospori; sporae lineares, hyalinae. Est *Puiggarina* scolecospora. — Huc pertinet *Ophiodothis paraguayensis* Speg. et tunc *Microph. paraguayensis* Speg. vocanda — Cnfr. etiam Theiss. et Sydow, Ann. Mycol. 13., 1915, p. 612.

1. **Ophiodothella Ingae** (P. Henn.) Theiss. et Syd., Ann. Mycol. 13., 1915, p. 614, *Phyllachora? Ingae* P. Henn., Hedw. vol. 48 (1908) p. 8. — Maculis sparsis vel effusis, brunneo-fuscis; stromatibus amphigenis, sparsis vel aggregatis, atris, angulato-pulvinatis, planis, 1-2 mm. diam.; perithecciis immersis, globulosis, obtuso-ostiolatis; ascis cylindraceo-clavatis, obtusis, paraphysatis,... immaturis. 5377

Hab. in foliis Ingae sp. (Leguminosae), Iponema, S. Paulo, Brasilia.

2. **Ophiodothella Fici** Ern. A. Bessey, Mycologia 11., 1919, p. 55, tab. 5. — *Ophiodothis Fici* Earle in Herb. Stromatibus foliicolis 1-10 mm. diam., sparsis v. quandoque concentrice aggregatis, infra nigrescentibus supra epidermide lacerata albicante diu tectis, folium incrassatum (650-860 μ) efficientibus in maculis flavescentibus margine ferrugineis insidentibus; perithecciis 400-450 μ altis 300-500 μ latis, ostiolis minute papillatis praeditis; ascis elongato-fusoi- 5378

deis 105-175 × 12-16, infra sensim angustatis, octosporis quandoque paraphysibus filiformibus septatis (?) ascos longitudine aequantibus obvallatis; sporis filiformibus continuis 77-87 × 4,7-6,2, dilute brunneis granuloso-farctis, medio vacuolo (?) 5 μ diam. praeditis; pycnidiis consociatis immersis, 180-300 μ diam. 75-100 μ altis; uniloculatibus primum astomis; conidiis elongatis, clavulatis, curvulis, hyalinis v. dilute brunneolis continuis, 19 × 1.

Hab. in foliis Fici aureae (Moraceae), prope Larkins Dade Co. Miami Little River Florida, nec non in Cuba, Amer. bor. — Species haec quia paraphysata potius ad gen. sequentem pertinere videtur.

SCOLECODOTHIS Theiss. et Syd., Ann. Mycol. 13., 1915, p. 412. — Est *Catacauma* paraphysata, sporidiis filiformibus continuis donata. Typ. gen.:

1. **Scolecodothis Castaneae** Racib. in Theiss. et Sydow, Ann. Myc. 13., 1915, p. 13. — Maculis epiphyllis atro-brunneis, 5-20 mm. lat., flavo-rubro-marginatis; stromatibus epiphyllis nervisequis, linearibus v. moniliformibus, rectis, 5 mm. longis, atro-nitidis; loculis globoso-depressis v. ovoideis, discretis, seriatis, 400 × 100, albis, ostiolis circularibus, 18 μ diam. (inclusa zona circumeunte); ascis filiformi-paraphysatis, 50-58 × 12, octosporis; sporidiis hyalinis, levibus, fusoideis, inaequilateris, 40-44 × 2,5-3, in asci lumine superne fasciculatis.

Hab. in foliis Castaneae argenteae (Fagaceae), Salak, Gedeh et Megamendong in ins. Java, valde frequens (RACIBORSKI).

2. **Scolecodothis circularis** (Bres.) Theiss. et Syd., Ann. Mycol. 13., 1915, p. 413, *Oxydothis circularis* Bresad., Ann. Mycol. 1906, p. 311 (nom. nud.). Syn. *Cocconia sphaerica* Rick, Fungi austro-amer. 72.— Stromatibus in maculis brunneis insidentibus, hypophyllis, irregulariter rotundatis, usque 4 mm. diam., nigris, nitidis, solitariis v. aggregatis; loculis confertis, rotundato-cuboideis, 360-450 μ latis 300-320 μ altis; ascis octosporis, utrinque angustatis breviter pedicellatis, 105 × 18-22; sporidiis parallele tetrastichis, rectis v. curvatis, hyalinis, continuis 56-66 × 4-5.

Hab. in foliis Myrsines sp. (Myrsinaceae), « Uva vermelha » dicta, Rio Grande do Sul, Brasilia.

3. **Scolecodothis hypophylla** (Theiss.) Th. et Syd., l. c., *Oxydothis hypophylla* Theiss., Broteria v. XII, 1914, fasc. 1., p. 28. — Stromata hypophylla, phyllachoroidea, primum simplicia orbicularia 3-6 mm.

diam., pulvinato-plana, atro nitentia, colliculosa, ostiolis crebris papillatis minimis punctato asperula; stroma primarium deinde annulo secundario stromatum cingitur diam. 1-1,5 cm. v. etiam tertio folii lamina fuscescente; maculis epiphyllis nullis: asci elongati, cylindraceo-clavati v. medio ventricosuli et utrinque attenuati, octospori, 110-120 × 15-20, sporidia lanceolato-filiformia, hyalina, continua, guttulis repletis, utrinque acuta, recta, 80-90 × 6-7.

Hab. in foliis Myrtaceae, São Leopoldo, Brasilia.

Subfam. 3. Montagnelleae

Sect. 1. Hyalosporae

HAPLOTHECIUM Theiss. et Syd., Ann. Mycol. 13., 1915, p. 614.— Loculi immersi perithecioidei stromate distincto destituti apice tantum plerumque connexi. Asci octospori paraphysati. Sporidia unilocularia hyalina. — Typ. gen.:

1. **Haplothecium amenti** (Rostr.) Th. et Syd., l. c., *Phyllachora amenti* Rostr., Syll. XI p. 372. 5382

MONTAGNELLINA v. Höhn., Fragm. z. Mykol. XIV n. 769 (1912). — Theiss. et Syd., Ann. Mycol. 13., 1915. p. 615. — Loculi subepidermici perithecioidei vix prominuli maturitate apice aperti, a stromate in mesophyllo laxe connexi, clypeum non efformante. Asci aparaphysati, octospori. Sporidia unilocularia hyalina. — Typ. gen.:

1. **Montagnellina Pithecolobii** (Racib.) v. Höhn., l. c., *Euryachora Pithecolobii* Racib., Syll. XVI p. 624. 5383
2. **Montagnellina stellaris** (Pers.) Th. et Syd., l. c., cum icon., *Euryachora stellaris* (Pers.) Fuck., Syll. II p. 625. 5384

Sect. 2. Hyalodidymae

PSEUDOSPHAERELLA v. Höhn., Fragm. z. Mykol. XIII n. 692 (1911).— Theiss. et Syd., Ann. Mycol. 13., 1915, p. 618. — Est *Haplothecium* ascis aparaphysatis, sporidiis hyalodidymis. Typ. gen.:

1. **Pseudosphaerella Baccharidis** (Rehm) v. Höhn., l. c., *Lizonia Baccharidis* Rehm, Syll. XVI p. 486. 5385
2. **Pseudosphaerella Cupaniae** (Rehm) v. Höhn., l. c., *Lizoniella Cupaniae* Rehm, Syll. XXII p. 165. 5386
3. **Pseudosphaerella Haplopappi** (Rehm) Th. et Syd., *Dothidella Haplopappi* Rehm, Syll. XIV p. 677. 5387

DIPLOCHORELLA Syd., Ann. Mycol. 11., 1913, p. 408. — Theiss. et Syd., l. c. 13., 1915, p. 620.— Syn. *Diplochora* Syd., l. c. p. 60 nec v. Höhnel. — Stromata totam folii crassitudinem occupantia, in utraque folii pagina discoidee erumpentia, planiuscula, parte loculigera in superficie matricis sita vel vix tantum immersa, loculis multis praedita. Asci clavati, aparaphysati. Sporidia oblonga, medio 1-septata, hyalina. — Gen. *Euryachorae* proximum a quo differt stromatis caracteribus.

1. **Diplochorella fertilissima** H. et P. Sydow, l.c. p. 60, fig. 2.— Stroma- 5388
tibus immersis, totam folii crassitudinem occupantibus et in utraque foliorum pagina discoidee erumpentibus, sparsis v. plus minus aggregatis, rotundatis, planiusculis, $^1/_4$-$^3/_4$ mm. diam , opacis, atris, contextu in parte peritheciigera ex cellulis polyedricis minutis 5-7 μ diam. composito; loculis numerosissimis (20-60) in quoque stromate, conico-globulosis 35-50 μ diam. prominulis; ascis fasciculatis, cylindraceis v. cylindraceo-clavatis, brevissime stipitatis v. sessilibus, apice rotundatis, 80-125 × 12-16, octosporis, aparaphysatis; sporidiis distichis, oblongo-fusiformibus, utrinque rotundatis, medio 1-septatis, non constrictis, hyalinis, 17-20 × 5,5-6, loculo superiore subinde parum latiore.

Hab. in foliis vivis Xylopiae aethiopicae (Anonaceae), Amani, Africa or. (A. Zimmermann).

2. **Diplochorella indica** (Sacc.) Theiss. et Syd., Ann. Mycol. 13., 1915, 5389
p. 662, *Dothidella indica* Sacc., Ann. Mycol. XII, 1914, p. 302. — Foliicola et petiolicola; stromatibus mox superficialibus, imprimis hypophyllis, disciformibus, planis, orbicularibus, rarius obtuse angulosis, v. confluentibus, 2-4 mm. diam., 80-100 μ cr., opace nigris, superficie obsolete reticulata et minutis ostiolis punctulata, tenuiter coriaceis, loculis numerosis, crebris, subrotundis, minimis, 60-80 μ diam., nigricantibus; ascis clavatis, apice rotundatis, breviter sensim pedicellatis, 45-55 × 12-14 plerumque contortis, parce filiformi-paraphysatis, octosporis; sporidiis distichis, tereti-clavulatis, utrinque rotundatis, medio 1-septatis, non constrictis, farctis, simulque minute 2-guttulatis, hyalinis, 18-20 × 6-7,5.

Hab. in foliis petiolisque omnino vivis Meliaceae cujusdam, an Turreae?, pr. Bombay, Ind. orient. (Prof. Saxton).

3. **Diplochorella Burchelliae** Sydow, Ann. Mycol. 18., 1920, p. 158. – 5390
Stromata amphigena, plerumque autem hypophylla, in epiphyllo maculas brunneolas saepe leniter depressulas efformantia, quoad magnitudinem et formam valde ludentia, sive minuta singularia

0,5-1 mm. diam., sive pluria aggregata saepe elongata striiformia vel imperfecte circularia 1-3 mm. longa, atra; loculi peritheciiformes subepidermales, densissime dispositi et inter se stromatice connexi 100-130 μ alti, 70-90 μ lati, ostiolo typico carentes; asci apaphysati, subsessiles vel brevissime stipitati, cylindraceo clavati, ad apicem rotundati, octospori, 65-80 × 10-11; sporae distichae, oblongo-ellipsoideae, medio 1-septatae, non constrictae, utrinque rotundatae, hyalinae, 15-17 × 3,5-4,5.

Hab. in foliis Burchellíae bubalinae (Rubiaceae), verisimiliter in Africa austr. lecta.

CYCLODOTHIS Syd. in Leaflets of Philipp. Bot. VI (1913) p. 1929; Sydow in Theiss. et Sydow, Ann. Mycol. 13., 1915, p. 626.— (Etym. *cyclos*, circulus et *dothis* pro Dothidea). — Stromata per epidermidem erumpentia, exacte annuliformia, loculos peritheciiformes continentia, loculis minutis pariete distincto minute celluloso praeditis. Asci clavati, indistincte paraphysati, octospori. Sporidia elongata, oblongo cylindracea, medio 1-septata, hyalina. — A *Diplochorella* differt dispositione loculorum.

1. **Cyclodothis Pachysandrae** Hemmi, Bot. Magaz. Tokyo v. XXIX, 1915, p. 414, cum icon. — Stromatibus hypophyllis, in epiphyllo maculas distinctas rotundas canas efficientibus, sparsis, per epidermidem erumpentibus, plus minus exacte annuliformibus, annulum 1-4 mm. diam., longum formantibus, contextu minutissime celluloso atro-brunneo; loculis numerosissimis, fere peritheciiformibus, densissime dispositis, globoso-conicis, 48-98 μ diam., pariete indistincto v. distincto minute celluloso atro-brunneo, ostiolis leviter prominulis; ascis clavatis v. cylindraceis, apice obtusis, subsessilibus, 44-56 × 8-12, octosporis, indistincte paraphysatis; sporidiis oblique monostichis usque distichis, fusoideis, rectis v. curvulis, utrinque attenuatis, medio 1-septatis, non constrictis, pluriguttulatis, hyalinis, 14-20 × 3-4,8. 5391

Hab. in foliis vivis Pachysandrae terminalis (Buxaceae), in urbe Maruyama prov. Ishikari Hokkaido, Japonia.

2. **Cyclodothis pulchella** Syd., loc. cit. — Stromatibus hypophyllis, in epiphyllo maculas plus minus distinctas decoloratas efficientibus, per epidermidem erumpentibus, exacte annuliformibus, annulum 2-4 mm. diam. formantibus, atro-brunneis, contextu minutissime celluloso, ob ostiola prominula minutissime asperatis; loculis numerosissimis, peritheciiformibus, densissime stipatis, globoso-conicis, 65-90 μ 5392

diam., pariete distincto minute celluloso obscure brunneo, nucleo albo, ostiolis leniter prominulis; ascis clavatis subsessilibus, 55-70 × 14-18, octosporis, indistincte paraphysatis; sporidiis 3-4-stichis, oblongo-cylindraceis, rectis vel leniter inaequilateris, utrinque obtusis, medio 1-septatis, non constrictis, hyalinis, 25-35 × 4-5.

Hab. in foliis Piperis corylistachyi (Piperaceae), Todaya, Mt. Apo, Mindanao, ins. Philipp.

SCIRRHIACHORA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 626. — Est *Diplochorella* loculis lineariter dispositis. — Typ. gen.:

1. **Scirrhiachora groveana** (Sacc.) Th. et Syd., l. c., *Scirrhia groveana* Sacc., Syll. IX p. 1040. 5393

2. **Scirrhiachora comedens** (Schw.) Th. et Syd, l. c., *Apiospora comedens* (Sch.) Sacc., Syll. I p. 541. 5394

ROSENSCHELDIELLA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 645.— Loculi superficiales perithecioidei, in stromate basali cuticula immerso discoideo insidentes, ostiolo genuino destituti. Asci fasciculati basilares, octospori, aparaphysati. Sporidia hyalodidyma. — Typ. gen.:

1. **Rosenscheldiella Styracis** (P. Henn.) Theiss. et Syd., l. c., *Naemacyclus Styracis* P. Henn., Hedw. vol. 48, (1908) p. 8.— Stromatibus hypophyllis, sparsis vel gregariis, pulvinato-superficialibus, atris, verrucoso-rugulosis, 1-2 mm. diam.; loculis immersis, verrucoso-ostiolatis, rotundatis, ca. 180 μ diam.; ascis clavatis, apice obtuse rotundatis, paraphysatis, octosporis, 70-90 × 15-20; sporidiis subtristichis, oblongo-fusoideis vel clavatis, obtusis, hyalinis, 1-septatis, 22-27 × 5-6. 5395

Hab. in foliis Styracis, Morro Pellado, S. Paulo, Brasilia.— A *Dothidella pulverulenta* (B. et Br.) distincta.

MONOPUS Theiss. et Syd., Ann. Mycol. 13., 1915, p. 647. — Loculi perithecioidei superficiales, pede brevi centrali in matrice radicati, ostiolo genuino destituti. Asci aparaphysati. Sporidia hyalodidyma. — Typ. gen.:

1. **Monopus pulverulentus** (B. et C.) Th. et Syd., l. c., *Dothidella pulverulenta* (B. et C.) Sacc., Syll. II p. 631. 5396

HAPLOTHECIELLA v. Höhnel, Ber. deutsch. bot. Ges. XXXV, 1917, p. 251 (descriptio nulla); XXXVI, 1918, p. 314. — Stroma hyphen-

chymaticum. Perithecia intraepidermica et cuticula connexa. Asci paraphysati octospori. Sporidia hyalina aequaliter biloculata. — Typ. gen.:

1. **Haplotheciella Hellebori** (Chaill.) v. Höhn., l. c. — Fructificatio altera *Dothisphaeropsis Hellebori* v. Höhn. 5397

Sect. 3. Phaeodidymae

PYRENOBOTRYS Theiss. et Syd., Ann. Mycol. 12., 1914, p. 182; 13., 1915, p. 627. — Fructificatio perithecioidea subepidermica maculiformis, ostiolo genuino destituta. Stroma nullum vel vix ex hyphis laxis efformatum. Asci octospori; paraphyses filiformes. Sporidia phaeodidyma. — Typ. gen.:

1. **Pyrenobotrys conferta** (Fr.) Th. et Syd., l. c., *Stigmatea conferta* (Fr.) Sacc., Syll. I p. 544. — Syn. *Dothidella Vaccinii* Rostr., Syll. IX p. 1038. 5398
2. **Pyrenobotrys Heliconiae** (P. Henn.) Th. et Syd., l. c., *Dothidella Heliconiae* P. Henn., Syll. XVII p. 850. 5399

CROTONE Theiss. et Syd., Ann. Mycol. 13., 1915, p. 629. — Stroma intramatricale montagnellaceum. Loculi subepidermici apice prominuli ostiolo genuino destituti. Asci aparaphysati octospori, infra caespitosi. Sporidia phaeodidyma. — Typ. gen.:

1. **Crotone Drimydis** (Lév.) Theiss. et Syd., l. c., *Bagnisiella Drimydis* (Lév.) Sacc., Syll. II p. 590. — Syn. *Montagnella Drimydis* P. Henn., Syll. p. 629. 5400
2. **Crotone Emmoti** (P. Henn.) Th. et Syd., l. c., *Dothidea Emmoti* P. Henn., Syll. XIV p. 681. 5401

TERATOSPHAERIA Sydow, Ann. Mycol. 10., 1912, p. 39. — Theiss. et Syd., l. c., 13., 1915, p. 631. — Loculi subepidermici, perithecioidei, ramoso-radiantes, ostiolo genuino destituti, contextu stromatico laxe hyphenchymatico. Asci caespitosi basilares, aparaphysati, octospori. Sporidia phaeodidyma.

1. **Teratosphaeria fibrillosa** Syd., l. c., cum icon. — Peritheciis amphigenis, plerumque dense in fibrillas eximie formatas ramosas quasi stellatim dispositas usque 1 cm longas seriatim aggregatis, in contextu matricis profunde immersis, globosis v. depresso-globosis, 150-220 μ diam., coriaceo-carbonaceis, atris, mutua pressione subinde angulosis, circa verticem matrice nigrificata cinctis, ostiolo 5402

atro tantum erumpente ; ascis fasciculatis, sessilibus v. subsessilibus, clavatis v. saccatis, saepe curvatis, apice rotundatis v. etiam attenuatis, muco involutis, apice crassius tunicatis, 70-110 × 20 36 aparaphysatis; sporidiis octonis, distichis v. tristichis, cylindraceis, medio 1-septatis, mox non, mox leniter constrictis, subinde curvulis, utrinque rotundatis, primo intus minute guttulatis, tandem eguttulatis et non v. vix constrictis, ex hyalino flavo-fuscidulis v. potius olivaceo-fuscidulis, 35-46 × 9-12.

Hab. in foliis P r o t e a e g r a n d i f l o r a e, Bains Kloof Wellington C. C., Africae austr. (E. M. Doidge).

STALAGMITES Theiss. et Syd., Ann. Mycol. 12., 1914, p. 189 ; 13.; 1915, p. 650. — Stroma erumpens cylindraceum, supra digitiformi divisum, loculi singuli apicem digitationum occupantes, parietibus propriis et ostiolis genuinis destituti. Asci octospori aparaphysati. Sporidia phaeodidyma. — Typus gen. :

1. **Stalagmites tumefaciens** (Syd.) Th. et Syd.; l. c., tab. IV, fig. 15, 5403
Dothidea tumefaciens Syd., Syll. XXII p. 435.

DOTHIDOTTHIA v. Höhnel, Ber. deutsch. bot. Ges. XXXVI, 1918, p. 5404
312. -- Perithecia prominentia, hypostromate hyphis perpendiculariter dispositis insidentia. Paraphyses filiformes. Asci octospori. Sporidia phaeodidyma.— Typus generis *Doth. Symphoricarpi* (Rehm ut Pseudotthia) v. Höhn.

Sect. 4. Hyalophragmiae

MONTAGNELLA Speg. — Syll. II p. 646, IX p. 1045, XI p. 377, XIV p. 682, XVI p. 629, XXII p. 439. — Syn., sec. Theiss. et Syd., Ann. Mycol. 13., 1915, p. 634, *Gillotia* Sacc. et Trott., Syll. XXII p. 253.

1. **Montagnella Alyxiae** Pat. et Har., Bull. Soc. Mycol. Fr. 1912, p. 5405
284. — Stromate atro vel atro-brunneo, coriaceo, non carbonaceo; peritheciis globosis, $^1/_3$-$^1/_2$ mm. diam., concoloribus, laevibus, poro pertusis, aliquando collabentibus, carnoso-coriaceis; ascis octosporis, pluriseriatis ; ascosporis hyalinis dein vix brunneolis, elongatis, utraque fine obtusis vel leniter attenuatis, triseptatis, ad septa constrictulis, 23-30 × 8-10.

Hab. in tumoribus ad ramos vivos praecipue in axillis A l y x i a e sp. (Apocynaceae), Tahiti (Paucher).

SYNCARPELLA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 631.— Est *Montagnella* ascis paraphysatis donata.— Typ. gen.:

1. **Syncarpella tumefaciens** (Ell. et Harkn.) Th. et Syd., l. c., *Montagnella tumefaciens* (Ell. et H.) Berl. et Vogl., Syll. IX p. 1046. — Syn. *Mont. Brotheriana* P. Henn., Syll. XVI p. 629. 5406
2. **Syncarpella tuberculiformis** (Ell.) Th. et Syd., l. c., *Plowrightia tuberculiformis* Sacc., Syll. II p. 638. 5407

Sect. 5. Hyalodictyae

HYALOCURREYA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 640.— Loculi subepidermici stromate connexi et stromate basilari adnati, apice subliberi ostiolo genuino destituti. Asci basilares fasciculati, aparaphysati. Sporidia hyalodictya. — Typ. gen.:

1. **Hyalocurreya sandicensis** (E. et E.) Th. et Syd., l. c., *Curreya sandicensis* El. et Ev., Syll. XIV p. 684. 5408
2. **Hyalocurreya palmincola** (Rehm) Th. et Syd., l. c., *Curreyella palmincola* (Rehm) Sacc. et Tr., Syll. XXII p. 441. 5409

Sect. 6. Phaeodictyae

CURREYA Sacc. — Syll. II p. 651, IX p. 1051, XI p. 378, XIV p. 684, XVI p. 632, XVII p. 585.

1. **Curreya peckiana** Sacc., Ann. Mycol. XIII, n. 2 (1915) p. 117. — Stromatibus laxe gregariis, plano-pulvinatis, prominentibus superficie leviter areolato-rimosis, epidermide cinctis, nigris, $^1/_2$-$^3/_4$ mm. diam.; loculis atris saepe stratosis 90 μ diam.; ascis tereti-clavatis, deorsum sensim breviter tenuatis, 60-70 × 10-12, octosporis; paraphysibus copiosis filiformibus, sursum lenissime incrassatis; sporidiis distichis v. oblique monostichis, elliptico-oblongis, utrinque obtusulis, v. basi acutulis, subinaequilateris, 5-7-septato-muriformibus, ad septum medium leviter constrictis, fulvo-fuligineis. 5410

   Hab. in ramulis corticatis emortuis Nemopanthi mucronatae, Tupper Lake N. Y., Arg. (House). — Pulchella, distincta species.

EPIBOTRYS Theiss. et Syd., Ann. Mycol. 13., 1915, p. 644.— Stroma montagnellaceus, intramatricale, crumpens. Loculi liberi perithecioidei stromate insidentes ostiolo genuino destituti. Asci aparaphysati, octospori. Sporidia phaeodictya. — Typ. gen.:

1. **Epibotrys bambusicola** (Speg.) Th. et Syd., l. c., *Curreya? bambusicola* Speg., Syll. IX p. 1051. 5411

Sect. 7. Scolecosporae

OPHIOCARPELLA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 644. — Est *Montagnella* paraphysibus destituta, sporidiis hyalinis filiformibus septatis donata — Typ. gen.:

1. **Ophiocarpella tarda** (Harkn.) Th. et Syd., l. c., *Ophiodothis tarda* Harkn., Syll. IX p. 1051. 5412

ROSENSCHELDIA Speg. — Syll. IX p. 1036, XVII p. 852.

1. **Rosenscheldia brenckleana** (Rehm) Theiss. et Syd., Ann. Myc. 13., 1915, p. 649, *Bertiella brenckleana* Rehm, Ann. Mycol. IX, 1911, p. 364. — Perithecia in soros secundum caulem longitudinales, 1-2 cm. long., 1-2 mm. lat. nigrescentes utrinque acutatos, caulis vix decorticati hypertrofici insidentes arctissime congregata, non connata neque mycelio perspicuo conjuncta, globulosa, glabra, nigra, poro perspicuo pertusa, excipulo parenchymatico, crasso fusco, 0,15 mm. diam.; asci cylindraceo-clavati, apice rotundati, octospori, ca. 100 × 12-14 J ope —; sporae cylindraceae, utrinque subacutatae, rectae v. subcurvatae, 3-septatae, ad septa vix constrictae, quaque cellula 2-guttulata, hyalinae, 30-36 × 5-6, distichae; paraphyses hyalinae. 5413

Hab. ad caulem Solidaginis, Kulm N. Dak., U.S. America, North Dakota Fungi n. 373 a (Brenckle). — Sec. Theiss. et Syd. l. c. eodem est ac *Rosensch. Heliopsidis* (Schw.) Th. et Syd., Syll. II p. 646 (ut Montagnella).

DISCOCHORA v. Höhnel., Ber. deutsch. bot. Ges. XXXVI, 1918, p. 315. — Habitus *Phyllachorae* sed ostiolo circinnato. — Typ. gen. *Disc. Ilicis* (Schl.) v. Höhn., fructificatio altera *Physalosporae Ilicis* (Schl.) Sacc. 5414

SEPTOCHORA v. Höhnel, Ber. deutsch. bot. Ges. XXXV, 1917, p. 254. — Descriptio nulla. — Typ. gen.: *Septochora samaricola* (Died.) v. Höhn. loc. cit. 5415

Genera incertae sedis v. e Dothideaceis removenda

MICRODOTHELLA Syd., Philipp. Journ. of Sc. C. Bot. v. IX, 1914 n. 2 p. 169. - Stromata subcuticularia, radiato-contexta, crustaceo-con-

vexa, hypothecio epidermali stromatico, 1-2 locularia. Asci typice octospori, paraphysibus atypicis. Sporidia hyalina unilocularia. — Typ. gen.: *Micr. ramularis* (Ell. in Asterina) Th. et Syd. = *Myiocopron ramulare* (Ell.) Speg.

1. **Microdothella culmicola** Syd., l. c., fig. 1, Theiss. et Syd., Ann. Myc. 5416
13., 1915, p. 259. — Stromatibus sparsis vel hinc inde aggregatis, subinde binis confluentibus, minutis 200-450 μ diam., rotundatis, leniter convexis, atris, cum basi in epidermide sitis in hypodermidem hyphas paucas solitarias fuscas tantum emittentibus, centro opacis, ad marginem dilute fuscis, ex hyphis radiantibus 2-3 μ latis remote septatis (articulis 10-18 μ longis) maeandrice curvatis contextis; loculis 1-2 in quoque stromate, poro rotundo 15-20 μ lato tandem apertis; ascis primitus globulosis, mox ovatis vel oblongis, apice rotundatis, sessilibus, octosporis, rarius 4-sporis, 35-55 × 18-22, paraphysatis; sporidiis plerumque distichis, ellipsoideis vel oblongo-ellipsoideis, continuis, hyalinis, 17-20 × 8-9.

Hab. ad culmos emortuos Ischaemi (Graminaceae), Lake Manguao et Chloridis incompletae (Graminaceae), Silonga, Palawan, Ins. Philipp. (Merrill).

GRIGGSIA F. L. Stevens et N. Dalby, Bot. Gazette, 68., 1919, p. 224 (Etym. a Cl. Rob. F. Griggs). — Perithecia solitaria dimidiata, astoma, demum apice irregulariter aperta e stromate superficiali epidermico orta; mycelio vegetativo interno; parietibus perithecium crassis parenchymaticis. Asci basilares octospori. Sporidia ovoidea, hyalina 1-locularia. Paraphyses hyalinae elongatae filiformes. Conidia in pycnidiis dimidiatis efformata. — Gen. *Rhipidocarpon* Th. et Syd. in Dothideales affinis, sed ostiolo carenti ad *Perisporiaceas* vergens.

1. **Griggsia cyathea** F. L. Stevens et N. Dalby, l. c. tab. XV-XVI. — 5417
Peritheciis subhemisphaericis 200-300 μ diam. 180-160 μ altis, parietibus basi et apice 24 μ circ. cr.; ascis ovoideis 51 × 17-24; sporidiis 17 × 10, ovoideis hyalinis, continuis. Statu conidico leptostromaceo, pycnidiis dimidiatis amphigenis v. plerumque epiphyllis, praedito; pycnidiis ambitu circularibus 200-315 μ diam. 10-30 μ altis, nigris, dense reticulatis, rectis 7 μ circ. latis; maculis irregularibus 1-3 mm. diam., numerosis; sporulis unilocularibus, ovoideis v. piriformibus, obscuris, obtusis, 28-34 × 14.

Hab. in frondibus Cyatheae arboreae (Filices), Maricao et El Alto de la Bandera, Porto Rico.

Fam. 4. Hypocreaceae De Not. *)

Sect. 1. Allantosporae

ALLANTONECTRIA Earle -- Syll. XVI p. 1140, XVII p. 778.

1. **Allantonectria Yuccae** Earle — Syll. XVII p. 728. -- Sacc., Notae mycol. XXII p. 167 (1917). 5418

Hab. in foliis Yuccae glaucae (Liliaceae), parasitica in pycnidiis *Kellermanniae*, Mandan (Leg. O. A. Stevens, comm. Brenckle). — Perithecia 130-150 μ diam.; asci 22-28 × 3,3-3,5, octospori; paraphyses guttulatae, deliquescentes; sporidia botuliformia (ut in *Valsis*) 4,7-5 × 1,8, hyalina; ostiolum, 10-11 μ diam., rubello-periphysatum; contextus tenuiter cellulosus, rubescens.

PSEUDONECTRIA Seaver 1909 (= Nectriella Sacc. 1877 non Nitzchke 1869; Byssonectria Karst. 1879).

1. **Pseudonectria bambusina** Syd., Ann. Mycol. 15., 1917, p. 214. – Perithecia plus minus dense aggregata, sed semper discreta, stromate nullo, superficialia, basi hyphulis paucis tenuibus pallidis cincta, conoideo-globosa, sed obtusa, glabra, levia, obscure brunnea, sub micr. flavo-brunneola vel rufo-brunnea, 75-100 μ diam., ostiolo parum perspicuo dilutiore, contextu irregulariter minuteque parenchymatico, circa ostiolum e fibris radiantibus composito; asci tenerrimi, fusoideo-clavati, 22-28 × 6-9, aparaphysati, octospori; sporae oblique monostichae vel distichae, oblongae vel anguste ellipsoideae, utrinque obtusae, continuae, saepe minute guttulatae, hyalinae, 9-10 × 2,5-3,5. 5419

Hab. in culmis emortuis Bambusae (Graminaceae) in consortio *Hyphomycetis* (Fungi) cujusdam, Rizal, Ins. Philipp. (H. S. Yates). — *Nectriellae Bambusae* proxima nisi identica.

2. **Pseudonectria pipericola** F. L. Stevens, Botan. Gazette, 65., 1918, p. 230. — Perithecis numerosis, minutis, 100-125 μ diam., rubridis, setulis paucis ostiolum circumdantibus praeditis; setulis brevibus 20-30 μ, obtusis, continuis; ascis cylindraceis octosporis. 50 × 5-7, aparaphysatis; sporidiis monostichis ellipsoideis v. oblongis, obtusis continuis hyalinis, 9-10 × 3-4. — Mycelio in Meliola arcte adpresso. 5420

*) Cnfr. Maire, Ann. Mycol. IX, 1911 p. 316, v. Höhnel et Weese, ibid. d. 422, et XII, 1914, p. 128.

Hab. parasitica in Meliola tortuosa (Fungi), in foliis Piperis umbellati et marginati (Piperaceae), in Porto Rico. — Affinis *Nectriae mycelophilae* Peck.

3. **Pseudonectria Metzgeriae** Ade et v. Höhnel, Ann. Mycol. 17., 1919, p. 117. — Peritheciis rubro-ocraceoflavis, superficialibus plerumque solitariis, globosis, supra discoideis, usque 270 μ altis 240 μ latis, disco 110 μ lato, pilis plus minus numerosis hyalinis simplicibus obtusis, 20-26 × 3-3,5, praedito; parietibus perithecii 12 μ cr., ostiolo periphysibus circumdato; paraphysibus nullis: ascis octosporis cylindraceis v. cylindraceo-clavatis, tenuiter tunicatis, 40-70 × 3-4, infra breviter v. longe pedicellatis; sporis monostichis v. distichis, rectis utrimque fusoideo-tenuatis, unilocularibus, 5 × 1,3-1,5; in medio sporarum corpusculis 2 raro 3 fusoideis 1,5 μ long. J. ope cyanescentibus sistunt. 5421

Hab. in parte superiore thalli Metzgeriae furcatae (Hepaticae), inter Brückenau et Mitgenfeld, Rhön, Germania (A. Ade).

Sect. 2. Hyalosporae

NECTRIELLA Sacc. - Syll. II p. 448, IX p. 941, XI p. 354, XIV p. 621, XVI p. 559, XVII p. 778, XXII p. 445.

1. **Nectriella Cucumeris** J. Hanzawa, Zeitschr. Pflzkr. XXIII (1913) p. 71, c. ic. — Conidiis haud stratosis, forma ludibundis, globosis, fusoideis, leniter clavatis vel cylindricis, rectis vel curvulis, utrinque rotundatis, 1-2-septatis, 14-23 × 6-8, hyalinis; conidiophoris simplicibus vel ramosis; chlamydosporis terminalibus vel intercalaribus, nunc unicellularibus, globosis, nunc bicellularibus, piriformibus, ad septum constrictis, 10-12 μ circ. longis, levibus, interdum seriatis; peritheciis superficialibus, stromate indistincto insidentibus, sparsis vel coacervatis, ovoideis vel globosis, verrucosis, 640-960 × 560-720, collo indistincto, ostiolo irregulari; ascis octosporis, cylindraceis vel clavatis, 230-250 × 25-34, operculo apicali dehiscentibus; sporidiis irregulariter dispositis, ovoideis vel ellipsoideis, hyalinis, 18-22 × 12-17; paraphysibus filiformibus 4-8 μ crassis. 5422

Hab. parasitica in radicibus caulibusque Cucumeris (Cucurbitaceae) in calidariis cultis, Hannover, Germania.

2. **Nectriella Casaresi** Gonz. Fragoso, Mem. R. Soc. Españ. Hist. Nat., t. 11., 1919, 3., p. 109. — Peritheciis globosis, usque 300 μ diam., sparsis vel paucis gregariis, contextu subceraceo-membranaceo, indistincte pseudoparenchymatico, rubro-aurantiaceo, ostiolo regulariter 5423

pertuso, stromate nullo, ad basim hyphis hyalinis, filiformibus, ramosis, circumdatis; ascis numerosis, fasciculatis, cylindraceis, apicem rotundatis, brevi crassiuscule stipitatis, usque 50 µ long. 5-6 µ diam., aparaphysatis, octosporis; sporidiis pallide aurantiaceis, hyalinulis, in ascis muco evolutis, ellipsoideis, usque 6 × 1,7, utrinque rotundato-incrassatis, 2-guttulatis, guttulis primum subhyalinis, dein facile colorantibus (Bleu C^4 B).

Hab. in foliis vivis Frullaniae dilatatae (L.) Dum. (Hepaticae), prope Villagarcia de Arosa, Pontevedra, Hispania (D. A. Casares).

3. **Nectriella maquilingica** Sacc., Notae Myc. XXIII p. 69 (Accad. Ve- 5424
neto-trent. 1917). — Peritheciis hinc inde sparsis v. in caespitulos approximatis, minutis, non collabentibus, dilute roseis, vix pruinulosis, 175-200 µ diam.; contextu tenui, celluloso, pallide roseo; ostiolo papillato; ascis tereti-clavatis, 60-65 × 7-9, apice obtuse tenuatis, lumine bifoveolatis, deorsum sensim tenuatis 4-sporis; paraphysibus crassis (spuriis?); sporidiis distichis v. oblique monostichis oblongo-fusoideis, utrinque obtusiuscule tenuatis, 11-12 × 3,6, nubilosis, hyalinis, continuis.

Hab. in ramis emortuis Leucaenae glaucae (Leguminosae), M. Maquiling, Ins. Philipp.

4. **Nectriella Ptychospermatis** Rehm, Ascomyc. Philipp. VI, Leaflets 5425
of Philipp. Bot. VI (1914) p. 2275. — Peritheciis gregariis, innato-erumpentibus, globulosis, flavidis, 120 µ diam., glabris, ostiolo conoideo minimo obscuriore praeditis, tenuiter parenchymatice contextis, mox collabentibus; ascis cylindraceis, 70-80 × 9-10, aparaphysatis, octosporis; sporidiis distichis, clavatis, continuis, hyalinis, 10 × 5.

Hab. in Ptychospermate Macarthurii (Palmae), Los Baños, ins. Philipp. (S. A. Reyes).

5. **Nectriella philippina** Rehm, Ascomyc. Philipp. IV, Leaflets of Phi- 5426
lipp. Botany VI (1913) p. 1935. — Peritheciis sessilibus, nonnullis arcte coacervatis, lenticularibus, sulfureis, minutissime fuscidule papillulatis, 150 µ diam., tenuiter imbricato-membranaceis, flavidule contextis, glabris; ascis ovoideis, sessilibus, crasse tunicatis, apice rotundatis, octosporis, 50 × 20-24; paraphysibus subramosis 1 µ cr.; sporidiis distichis, ovoideis, utrinque rotundatis, continuis, hyalinis, 15-18 × 9.

Hab. ad caulem emortuum Passiflorae quadrangularis (Passifloraceae), Luzon, Prov. Laguna, Los Baños, ins. Phi-

lipp. (C. F. Baker).

HYPONECTRIA Sacc., Syll. II p. 455, XI p. 354, XIV p. 621, XVI p. 559, XXII p. 443.

1. **Hyponectria Embeliae** Petch, Ann. R. Bot. Gard. Peradeniya, v. VI, P. III, 1917, p. 228. — Maculis rubro-aurantiacis, rotundatis, ad 2 cm. diam., ostiolis minutis, pellucidis punctatis; peritheciis immersis, sparsis, ovoideis vel subglobosis, supra conicis, 0,4 mm. alt., 0,25-0,3 mm. diam., pariete hyalino, ostiolo epiphyllo; ascis cylindraceis, breviter pedicellatis, octosporis, 100-120 × 10-14; paraphysibus linearibus, numerosis; sporis monostichis saepius obliique, late ovalibus, hyalinis, continuis, episporio crassiusculo, 10-12 × 7-8. 5427

   Hab. in foliis Embeliae viridiflorae (Diapensiaceae), Hakgala, Ceylon.

2. **Hyponectria Phaseoli** F. L. Stevens, Bot. Gazette 70., 1920, p. 401.— Maculis amphigenis circularibus 5-10 mm. diam., e paucis numerosis saepe confluentibus, pallide flavidis, translucidis margine indefinitis; peritheciis copiosis, immersis, translucidis, 200-230 μ diam., maturis ostiolo distincto 20 μ diam. prominenti et margine structura clypeata donato praeditis; ascis e linearibus clavatis 75 μ long., octosporis; sporidiis monostichis ad apicem irregulariter confertis, irregulariter e sphaeroideis ovoideis, saepe e mutua pressione angulosis, continuis, hyalinis, 9-10 × 12; paraphysibus filiformibus ascos subaequantibus. 5428

   Hab. in foliis Phaseoli adenanthi et Phaseoli sp. nec non Vignae vexillatae (Leguminosae), in Porto Rico pluribus locis.

3. **Hyponectria Memecyli** Petch, Revis. Ceylon Fungi, Ann. R. Bot. Gard. Peradeniya, v. VI, P. IV, 1917, p. 328.— *Sphaeria Chionanthi* Berk. et Br., Fungi of Ceylon n. 1114; *Didymella Chionanthi* (Berk. et Br.) Saccardo, Syll. I p. 549; *Sphaerella Ch.* (B. et Br.) Cooke.— Sec. Cl. Petch in l. c., fungus est vera *Hyponectria*, sed sporis demum uniseptati etiam *Charonectria*, sed matrice errata (non Chionanthus zeylanicum vero Memecylon umbellatum, Melastomataceae) species *Hyph. Memecyli* vocanda. 5429

4. **Hyponectria sinensis** Sacc., Philipp. Journ. of Sc. Manila, P. I, 1921, p. 599. — Maculis corticalibus subalutaceis, versiformibus; peritheciis dense gregariis, subcutaneis, globulosis, 0,20-0,25 mm. diam., pallidis, ostiolo subumbilicato albo erumpenti; contextu laxe cel- 5430

luloso, sordide aureo; ascis cylindraceis, breviter stipitatis, 130-150 × 17-19, apice rotundatis, tunica initio incrassata praeditis, paraphysibus diffluentibus, octosporis; sporidiis oblique monostichis oblongo-limoniformibus, apicibus brevissime apiculatis, rectis v. inaequilateris, 28 × 12, hyalinis, farctis.

Hab. in ramis morientibus Citri sp. (Rutaceae), Kwang Tung, Paak Shan, Cina (REINKING). — Ad genus *Physalosporinam* nutat.

BYSSONECTRIA Karst. — Syll. II p. 456, IV p. 942, XI p. 354, XIV p. 623, XVI p. 560, XXII p. 446.

1. **Byssonectria aggregata** Bresad., Ann. Mycol. IX, 1911, p. 275. — 5431
Subiculo pallido ex hyphis conidiferis, 1-4 μ cr., efformato; conidiis hyalinis, obovatis, 12-15 × 6-9; peritheciis caespitulose aggregatis, obovatis, tenuiter papillatis, furfuraceis, $^1/_4$ mm. diam., carneolis, contextu parenchymatico; ascis cylindraceis v. clavatis, 100-120 × 7-15, plus minusve stipitatis; sporidiis monostichis, distichis v. conglobatis, hyalinis, continuis, oblongis, 11-13 × 4-5; paraphysibus nullis.

Hab. ad corticem arborum, Kisantu, Congo (VANDERYST). — In subiculo adsunt quoque hyphae stramineae, septatae, tenuiter tunicatae, majores, quarum connexionem cum hyphis conidiferis Auctor eruere non potuit.

UROPOLYSTIGMA A. Maublanc, Bull. Soc. Mycol. de Fr., XXXVI, 1920, p. 36 (Etym. a *oura* cauda et *stigma* punctum). — Stroma subcarnosum, fulvum, depresso-clypeatum, epidermide persistente tectum; perithecia immersa; asci cylindracei, 8-spori, paraphysati; sporidia elliptica, sursum in rostrum attenuata, continua, hyalina. — A *Polystigma* stromate incompleto, sporidiis caudatis diversum; caractere stromatis gen. *Apiosphaeriae* v. Höhn.

1. **Uropolystigma atro-testaceum** A. Maublanc, l. c., tab. III fig. 1-4. — 5432
Maculis sparsis v. gregariis, orbicularibus, 3-8 mm. diam., amphigenis, ad epiphyllum planis, fulvis, dein maculis nigris, subnitentibus, angulosis nervulisque limitatis centro ornatis, demum nigris, annulo fulvo cinctis, ad hypophyllum leviter convexis, testaceis v. aurantio-testaceis, margine striatulis, centro ostiolis punctatis, demum tuberculatis. Stromatibus sub epidermidem persistentem nascentibus, depresso-clypeatis, intus pallidis, usque ad 400 μ crassis; contextu subcarnoso, e cellulis seriatis, hyalinis, tenue tunicatis formato. Peritheciis immersis, globoso-lenticularibus, 250-500 μ diam.

tunica tenui, hyalina, stromate adnata praeditis ; ostiolis hypophyllis, primum impressis, obscurioribus ; ascis cylindraceis, apice obtusis incrassatisque, deorsum plus minusve longe pedicellatis, 150-210 × 8-9 (pars. sporif. 120-165 μ), paraphysibus numerosis, filiformibus ; sporidiis monostichis (raro medio distichis), oblongis, basi obtusis, sursum (rarius deorsum) in rostrum conoideum, rectum v. incurvatum, acutiusculum desinentibus, hyalinis, continuis, granulosis, 25-31 (cum rostro) × 5-7. Mycelio hyalino, in parenchymate evoluto.

Hab. in foliis vivis Malpighiaceae cujusdam, Ouro Preto et Caraca, Brasiliae.

LEPTOCREA Syd., Ann. Myc. 14., 1916, p. 87 (Etym. *leptus* tenuis et *creas* caro, ob stroma tenue carnosulum).— Stromata subepidermica, innata, laeticoloria, 1-v. confluendo 2-loculigera. Asci clavati, paraphysati, 8-spori. Sporidia oblonga, continua, hyalina. Conidia discoidea, continua, colorata.

1. **Leptocrea orbiculata** Syd., l. c. p. 87, fig. 5. — Stromatibus in epi- 5433
phyllo tantum visibilibus, maculis nullis vel obsoletis pallidis indeterminatis insidentibus, sparsis, subinde duobus juxtapositis et confluentibus, orbicularibus, 175-250 μ latis, usque 100 μ altis, subepidermalibus, flavo-rufis, centro papillato-perforatis, pariete 15-25 μ crasso carnosulo flavido minute celluloso, loculum singulum continentibus. Ascis cylindraceis, breviter stipitatis, 65-80 × 10-14, octosporis, filiformiter paraphysatis ; sporidiis distichis, oblongis, utrinque saepe leniter attenuatis, sed apicibus obtusis, continuis, eguttulatis, hyalinis, 12-15 × 4-4,5 ; stromatibus conidiigeris similibus, sed paullo minoribus; conidiis e fronte visis discoideis, 6,5-8 μ diam., e latere visis ellipsoideis vel oblongis, continuis, fuligineis, levibus, guttula 1 centrali oleosa praeditis, tandem protusis et matricem inquinantibus, sporophoris hyalinis suffultis.

Hab. in foliis Pithecolobii sp. (Leguminosae), Seringal, Auristella Rio Acre, Peruvia (E. Ule).

PHYSALOSPORINA Woron. — Syll. XXII p. 444.

1. **Physalosporina Tranzschelii** Woron., Ann. Mycol. IX, 1911, p. 224. 5434
Rehm, Ascom. Exsicc. fasc. 46 n. 1935. — Stromatibus e cortice caulis erumpentibus, dein valde excrescentibus, 3-4 cm. (usque ad 10-12 cm.) longis, plerumque totum caulem cingentibus, ex cellulis parenchymaticis hospitis mutatis atque hyphis constructis ; extus

cinereis (sub lente fuligineis), intus albidis v. pallide roseis (sub lente incoloratis v. umbrinis); peritheciis in superiorem partem stromatis immersis, vix ostiolis eminentibus, globosis v. oblongis atque in superiore parte leviter coarctatis (300)-400-435(-600) × (275)-300-320(-345), contextu parenchymatico fuligineo; ascis cylindraceis v. cylindraceo-fusoideis, 130-135 × 10-12 (14), paraphysatis, membrana apice, saepe incrassata et poro pertusa; sporis monostichis, ovoideis, 13-15 × 7,5-8. — Pycnidiis angulato-globosis, saepe oblongis, 165-220 × 90-200 (pleramque 160-190 μ), conspicue rostratis, stromati immersis v. subsuperficialibus, saepe inter se coalescentibus, contextu parenchymatico fuligineo; sporulis bacillaribus, 4-5 × 1.

Hab. in ramis Caraganae fruticis (Leguminosae), Gub. Ufa distr. Belebej prope Durassovo, Rossia (Sirajevskij).

2. **Physalosporina Onobrychidis** (Jaap) Saccardo, *Physalospora Onobrychidis* Jaap, Ann. Mycol. 14., 1916, p. 14. — Peritheciis late sed laxe gregariis, subcutaneis, demum ostiolo per epidermidem tumidulum erumpentibus, globosis, e flavido brunneolis, 150-300 μ lat., contextu stramineo-flavo, circa ostiolum obscuriore; ascis tereti-fusoideis, breviter crasseque stipitatis, apice late rotundatis, 80-100 × 10-20, octosporis; sporidiis irregulariter monostichis, in medio asco saepe horizontalibus, ellipsoideis, rotundatis, 10-20 × 7-10, continuis, hyalinis, grosse granulosis, strato mucoso carentibus. 5435

Hab. in foliis vivis et languidis Onobrychidis Capitis-galli (Leguminosae), pr. Traù, Dalmatiae.

3. **Physalosporina Ducellieri** Maire, Bull. Soc. H. N. de l'Afr. du Nord, 1917, p. 160 fig. 2. — Stromate e pallido incarnato, demum rufo-brunneo, ex hyphis valde incrassatis, amyloidiferis, intercellularibus, per totum folium expansis contexto; peritheciis epiphyllis sparsis v. gregariis, immersis, rubris, ostiolo demum prominulo, fuscescenti, minuto, subglobosis v. ovoideo-lageniformibus, 200-205 × 150-200, contextu celluloso, granulis rubro-aurantiis farcto; paraphysibus filiformibus, septatis, membrana gelificata mox evanidis; ascis cylindraceis, inoperculatis, membrana gelificata praeditis, 75-85 × 10-12; sporidiis monostichis, ellipsoideis, levibus, hyalinis continuis, 2-8-guttulatis, 13-15 × 7-8; pycnidiis epiphyllis, subepidermicis, subglobosis, 70-100 μ diam., subhyalinis; sporulis hyalinis, 4-5 × 1,5-2,5. 5436

Hab. in foliis Onobrychidis Capitis-galli (Leguminosae), in dunis Maison-Carrée et in Kabylia, Africae bor. — Etsi

diagnoses satis differant, species a praecedente non videtur diversa.

GLAZIELLA Berk. — Syll. II p. 581, IX p. 1004, XVI p. 615.

1. **Glaziella Bakeriana** Sacc., Notae Mycol. XXIII p. 69 (Accad. Ve- 5437
neto-trent. 1917). — Stromatibus alte pulvinatis, 3-4 mm. diam., irregulariter e basi plana hemisphaericis, levibus, vix ostiolis minimis punctulatis, rufescentibus, extus demum nigricantibus, contextu celluloso fusco-purpureo; peritheciis globulosis, stromate omnino immersis, plerumque monostichis, $^1/_3$ mm. diam.; contextu celluloso saturate purpureo; ascis cylindraceis, exiguis, apice obtusulis, subsessilibus, 28-32 × 4,5-5, octosporis, aparaphysatis; sporidiis monostichis, rarius medio distichis, ellipsoideis, apice rotundioribus, 7-8 × 3,5, hyalinis, obsolete guttulatis.

Hab. in culmis emortuis Bambusae vulgaris (Graminaceae), Los Baños, Ins. Philipp. — Eximius fungillus, habitu *Hypoxyli* sed fructificatione (quae rarius pertecta) et indole omnino diversus.

2. **Glaziella cyttarioides** Spegaz., Rel. Mycol. trop. etc. in Bol. Ac. Nac. 5438
Cienc. Cordoba, t. 23., 1919, Extr. p. 119. — Subglobosa 20-40 mm. diam. mediocris, lateraliter culmo adfixa eumque non v. vix amplectens, primo albescens, serius in tertio infero applanatulo fertilis flavida minutissime densissimeque porosa ac subvelutina, ceterum sordide fusca glabra laevis, intus farcta carnoso-compacta alba; loculi dense constipati ostiolo pro ratione latissimo (50-60 μ) pertusi; asci lineares octospori, 350 × 10; sporae filiformes tenuissime fasciculatae hyalinae, 250 × 1-1,5.

Hab. ad ramos vivos Guaduae sp. (Graminaceae), in silvis Coaguazù, Americae austr. trop. (B. Balansa). — Colore *Mycomalo bambusino* Möll., forma *Ascopolyporo polychroo* Möll. affinis sed coeterum diversa.

Sect. 3. Phaeosporae

MELANOSPORA Corda — Syll. II p. 461, IX p. 950, XI p. 356, XIV p. 626, XVI p. 563, XVII p. 781, XXII p. 452.

1. **Melanospora Asparagi** G. Arnaud, Ann. Service Épiphyties t. 2., 1915, 5439
p. 273, cum icon. (absque diagn.). — Peritheciis sphaeroideis nigris 200 μ circ. cr. collo brevi terminatis, parietibus translucidis, flavo-brunneis; ascis mox diffluentibus et tunc aegre visibilibus; sporidiis breviter fusoideis brunneis, 17 × 11. — Status conidicus quan-

doque in culturis tantum visus, ad gen. *Stilbum* pertinens, et verisimiliter cum Melanospora connexo.

Hab. in caulibus Asparagi officinalis (Asparagaceae), quos valde vexat, Montpellier, Gallia!

2. **Melanospora rhizophila** Pegl. et Sacc., Ann. Mycol. 11., 1913, p. 16.— 5440
Peritheciis subsparsis, v. gregariis, minutissimis, superficialibus, globulosis, 150-200 μ diam., in ostiolum cylindraceum, 160 × 30, apice fimbriatum abrupte tenuatis, hinc phialiformibus, glabris, luce directa nigricantibus, contextu vero tenuiter carnosulo, sordide roseo, perithecii minute parenchymatico, ostioli prosenchymatico; ascis ovato-oblongis, 50-55 × 20-22, subsessilibus, octosporis, aparaphysatis, mox evanidis; sporidiis distichis ellipsoideo-limoniformibus, h. e. utrinque apiculatis, primo brunneis grosse 1-guttulatis, dein fuligineis.

Hab. in radicibus putrescentibus Cucurbitae Peponis (Cucurbitaceae), Ferrara, Ital. bor. socia *Fusarii* specie forte ejusdem statu conidiophoro (V. Peglion). — Affinis *Melanosporae vervecinae*, a qua glabritie et minutie omnium partium dignoscitur. Perithecia interdum etiam intra radiculas putres matricis inveniuntur.

3. **Melanospora papillata** Hobson, Proc. Amer. Acad. 1912, p. 251 t. II 5441
fig. 1-26. — Peritheciis sparsis v. gregariis, superficialibus, membranaceis, semidiaphanis, stramineis v. laete brunneolis e globoso piriformibus, 400-500 × 350-450, papilla setis erectis, subdivergentibus, continuis, 100-170 μ longis superata; ascis clavatis; sporidiis inaequilateris, lunulatis, 25 × 10, e flavido brunneis, demum nigris; conidiis copiosis, e sphaerico ovoideis pseudobasidiis phialiformibus suffultis; bulbillis flavido-brunneis, multicellularibus, ambitu irregularibus, 50-60 μ diam., interdum amplioribus.

Hab. in cortice vivo Quercus agrifoliae (Cupuliferae), Pomona California, Amer. bor.

4. **Melanospora anomala** Hobson, Proc. Amer. Acad. 1912, p. 257, t. II 5442
f. 27-30, tab. III f. 1-15. — Peritheciis sparsis v. gregariis, superficialibus, membranaceis, e stramineo brunneolis, globosis v. subglobosis, 350-450 × 250-350, ostiolo inconspicue papillato, calvo; ascis....; sporidiis inaequilateris, sublunulatis, 28 × 14 e flavido brunneo-nigricantibus; conidiis e sphaerico ovoideis, hyalinis, pseudobasidiis phialiformibus suffultis; bulbillis multicellularibus flavido-brunneis subglobosis, 70-140 μ diam., v. elongatis usque ad 180 μ.

Hab. in fructibus Aesculi Hippocastani (Hippocastanaceae), (spanish-chestnuts, ex Hispania?), Boston, Amer. bor.

5. **Melanospora mattiroliana** Mirande, Bull. Soc. Mycol. Fr. XXXII 1916, p. 72 fig. 1-3. — Peritheciis gregariis, superficialibus, subglobosis, 240-340 μ diam., pallide flavidis, translucidis, pilis hyalinis, septatis conspersis; ostiolo cylindraceo recto v. curvulo, concolori, 195-360 × 59-65, interdum multiplici, apice fimbriato; ascis late clavatis, 8-sporis, 50-60 × 25-30, crassiuscule pedicellatis, mox diffluentibus, filiformi-paraphysatis; sporidiis e globoso late ellipsoideis, utrinque acuminatis, 14-24 × 11-19, fusco-olivaceis, crebre guttulatis, fusco-olivaceis, demum in massam mucosam nigricantem expulsis. 5443

Hab. in foliis et caulibus plantarum, Grenoble, Galliae — Simul occurrit st. conidiophorus *Spicariae* sp. referens, conidiophoris 50 μ longis, acro pleurogene sporiferis, pseudobasidiis (phialis) verticillatis v. subsparsis, ventricosis, apice acutis; conidiis ellipsoideo-teretiusculis, 15-20-catenulatis, 25-9 × 2. A *Mel. globosa* ostiolo breviori, paraphysum praesentia, a *Mel. gibelliana* sporidiis subglobosis videtur distincta.

6. **Melanospora Mangini** Vincens, Bull. Soc. Mycol. Fr. 33., 1917, p. 69, c. icon. — Peritheciis superficialibus, sparsis v. aggregatis, globulosis, 200-350 μ diam., collo cylindraceo, brevi, truncato, ciliis destituto; initio succineis dein brunnescentibus; ascis copiosis clavatis 40-50 × 10-15, facile diffluentibus, parce paraphysatis; sporidiis limoniformibus, atro-brunneis, 15-20 × 10-12, episporio leviter long. ruguloso-plicato; forma conidica *Spicariae* affinis decumbens; pseudobasidiis sparsis, phialiformibus 7-10 × 2,5-3; conidiis hyalinis ovoideis v. ellipsoideis, 3-5 × 1,5-2,5. 5444

Hab. in ligno putrescenti (*bois bleu*), in Gallia (Mangin).

7. **Melanospora curvicola** Hobson, Proc. Amer. Acad. 1912, p. 254, t. III f. 16-24. — Peritheciis sparsis v. gregariis, superficialibus, membranaceis, semidiaphanis, stramineis dein brunneolis, e globoso piriformibus, 450-550 × 350-450, rostello definito, 85-140 μ longo praeditis; setulis terminalibus 100-170 μ longis, erectis, subdivergentibus, continuis acutis subulatis; ascis....; sporidiis inaequilateris, sublunulatis, 25 × 10 e flavido brunneo-nigricantibus; conidiis hyalinis e sphaerico ovoideis pseudobasidiis phialiformibus suffultis; bulbillis multicellularibus flavido-brunneis, irregularibus, 50-60 μ diam., rarius 100 μ. 5445

Hab. in fimo cuniculorum, Cambridge Mass., Amer. bor. (Thaxter). — Praeter conidia descripta, occurrunt formae *Hargiae* et *Acremoniellae* adscribendae.

8. **Melanospora Schmidtii** P. A. Saccardo n. sp., *Melanospora* sp. Alfr. Schmidt, Jahresb. Schles. Gesellsch., 1912, p. 22.— Peritheciis initio subiculo albo effuso immersis, flavo-brunneis v. subrubellis, solitariis, sparsis, globosis, pilis septatis, hyalinis, divergentibus conspersis, 210-320 μ diam., totis 400-900 μ altis, ostiolo cylindraceo apice fisso 400-500 μ alto, basi 50 μ cr., contextu parenchymatico subdiaphano, cellulis globoso-angulosis 9-12 μ diam.; ascis 8-sporis, mox diffluis; sporidiis ellipsoideis, utrinque apiculatis, 22-24 × 15,5-17, opace atro-brunneis, apiculis minutis, hyalinis. 54

Hab. in fimo caprearum, Amani, in Africa orient. — Diagnosis satis plena ut species nomine proprio distingui mereatur.

SPHAERODES F. E. Clements, Genera of Fungi 1909, p. 44 et p. 173.— Est *Sphaeroderma* esubiculatum. Typus gen. *Sph. episphaericum* (Ph. et Pl.) F. E. Clen. — Cnfr. Syll. II p. 460. — Si hoc nov. gen. validum, vero *Vittadinula* Sacc. vocandum (Syll. II p. 560). 54

RHYNCHOMELAS F. E. Clements, Genera of Fungi 1909, p. 44, 173. — Est *Melanospora* stromatica. Typus *M. arenaria* Mont. 54

HYPOXYLINA Starb. — Syll. XXII p. 453.

1. **Hypoxylina philippinensis** Rehm, Ascom. Philippin. VII, in Leaflt. of Philippin. Bot. VIII, 1916, p. 2921.— Perithecia sessilia, plerumque 2-4 in caespitulis orbicularibus 2 mm. latis, arcte congregata, atra, glabra, sphaeroidea, mox patellaria, distincte marginata, 0,3-0,8 mm. lata, sicca valde corrugata, ad basim distincte parenchymatica, versus marginem ex cellulis circa 20 × 10, pseudoprosenchymatice contexta nigro-coerulea; ascis clavatis, apice rotundatis et crasse tunicatis, 80-90 × 12, 8-sporis; 1-sporis ellipsoideis, 1-cellularibus, glabris, subfuscis, 12-15 × 7, 2 versus basim 1-stichis; paraphysibus hyalinis, vix visibilibus. 54

Hab. ad ramos emortuos Derris philippinensis (Leguminosae), Los Baños, Ins. Philipp. (C. F. Baker).

COLLETOMANGINIA Har. et Pat. — Syll. XXII p. 454.

1. **Colletomanginia paradoxa** Har. et Pat.— Sacc., Syll. l. c. 54

Hab. ad truncos Abietis pectinatae (Coniferae), in M. Botchild, Africa orient. britannica (Rotschild!). — Cl. Hariot in litt. declarat etymon generis, non ut explicatur in Syll. l. c. sed ex *colletos*, junctus et *Manginia* derivatum, sed ratio pariter me latet (Sacc. in ms.).

DASYPHTHORA F. E. Clements, Genera of Fungi 1909, p. 45, 173. — 5451
Est *Nectria* pilosa. — Typus *D. lasioderma* (Ell., in Nectria, Syll. II p. 505).

Sect. 4. Hyalodidymae

NECTRIA Fr. — Syll. II p. 479, IX p. 955, XI p. 357, XIV p. 628, XVI p. 565, XVII p. 778, XXII p. 455.

I. *Eu-Nectria*

1. **Nectria Funtumiae** Massee, Kew Bull., Miscell. Inf. 1909, p. 147. — 5452
Caespitulis erumpentibus minutis, 3-6 peritheciigeris, sparsis; peritheciis globoso-depressis, glabris, levibus, coccineis, 350-400 μ diam., ostiolo crasse obtuseque papillato brunneo instructis; ascis cylindraceis, apice obtusis, rotundatis, octosporis; sporidiis oblique monostichis, ellipsoideis, hyalinis, 1-septatis, 14-15 × 6.

Hab. parasitica in truncis vivis Funtumiae elasticae (Apocynaceae) quos necat, ~~Kew~~, Anglia. — A *N. ditissima* peritheciis gregarie sparsis, latioribus, ostiolo magis prominenti differt.

2. **Nectria meliolicola** F. L. Stevens, Bot. Gazette, 65., 1918, p. 231. — 5453
Amphigena. Maculis nullis, mycelio albo, Meliolae et folio arcte adpresso; peritheciis minutissimis 50-60 μ cr., hyalinis, apice pilosis, pilis 15 μ long.; ascis e ovatis ellipsoideis, obtusis stipitatis, 40-45 × 11-14; sporidiis oblique 1-seriatis, uniseptatis, hyalinis, linearibus, acutis, 24-28 × 3-4.

Hab. in foliis Caseariae silvestris (Flacourtiaceae), parasitica *Meliolae Paullíniae* St. (Fungi) et socia cum *Fusario*, Mayaguez, Porto Rico.

3. **Nectria Albizziae** Woronichin,? Ann. Horto Bot. Tiflis, 1920, Extr. 5454
p. 20, fig. 7. — Stromatibus pulviniformibus, erumpentibus, pallide testaceis; peritheciis caespitosis, ceraceo-mollibus, levibus, 5-30 in quoque stromate, sphaeroideis, papillatis, 200-235 μ diam.; ascis cylindraceis, apice leviter attenuatis, breviter pedicellatis, 44-49,5 × 6-6,6; sporidiis elongato-ellipsoideis, hyalinis, uniseptatis, mono- vel distichis, 9,9-11,6 × 3-3,3.

Hab. in ramis subvivis Albizziae Julibrissin Boiss. (Leguminosae), Caucasus, distr. Batum, pr. Tshakva, Asia occ. (Serebrjakov).

4. **Nectria sordescens** Sacc., Notae Myc. XXIII p. 69 (Accad. Veneto-trent. 1917). — Peritheciis in acervulos minutos 0,5-1 mm. latos 5455

gregarios 6-10 confertis, globosis, breviter papillatis non collabentibus, extus sordide fusco-purpureis, non omnino levigatis; contextu parenchymatico rubro; ascis tereti-fusoideis, apice obtusulis luminеque 2-foveolatis, 60 × 6, octosporis; paraphysibus cylindraceis spuriis (ascis inevolutis?); sporidiis distichis oblongis, apice rotundioribus, 1-septatis, non constrictis, 11,5-12 × 4,5, obsolete 2-4-guttulatis, hyalinis.

Hab. in ramis emortuis Leucaenae glaucae (Leguminosae), Los Baños, Ins. Philipp. (M. B. RAIMUNDO, comm. BAKER).

5. **Nectria portoricensis** F. L. Stevens, Bot. Gazette. 65., 1918, p. 231.— 5456
Coloniis subcircularibus 3-7 mm. diam., albis, centro fertilibus peritheciferis extus sterilibus, mycelio parasitico albo effuso copioso; peritheciis rubris, parvis, levibus, 160 μ cr.; ascis obovatis, obtusis, 25-36 × 8; sporidiis oblique monostichis, oblongis, hyalinis, v. e pallidis chlorinis, uniseptatis, obtusis, 12 × 3.

Hab. in foliis Banisteriae laurifoliae (Malpighiaceae), parasitica *Meliolae rectangularis* (Fungi), Jayuya, Porto Rico.

6. **Nectria viridula** Pat., Bull. Soc. Mycol. de Fr., 1913, p. 224. — Pe- 545
ritheciis plerumque 2-5 in stromate minuto aggregatis, globosis $^1/_1$-$^1/_3$ mm. diam., ostiolo depressis, carnosis, flavo-viridibus, pruina aureo-virescenti tectis, rimosulis sed non villosis, pruina secedenti ochraceis; contextu parenchymatico e cellulis angulosis 15 μ circ. cr., flavidis; ascis octosporis 40-60 × 5-6, aparaphysatis; sporidiis navicularibus, levibus, hyalinis, uniseptatis, saepe quadriguttulatis 13-15 × 5-6.

Hab. in cortice Syringae japonicae (Oleaceae), Chi Nè, Tonkin Cina, Asia (DUPORT).— Species minuta *N. chlorellae* et *N. chrysites* proxima.

7. **Nectria Orchidearum** Theissen, Ann. Mycol. IX, 1911, p. 48, tab. VI 545
fig. 65. — Peritheciis sparsis, botryose aggregatis v. solitariis, globosis, subapplanatis, fusco-aurantiacis, papilla concolore vix perspicua 200-250 μ diam., floccosula, ostiolo pertusulis; ascis cylindraceis, breviter pedicellatis, supra rotundatis, p. sp. 52-60 × 5-6; sporis oblique monostichis v. subdistichis, hyalinis, oblongis v. ellipsoideis, utrinque angustato-rotundatis, medio non constrictis, utraque cellula biguttulata, 10 × 4.

Hab. in pedunculo Orchidaceae epiphytae ignotae, São Leopoldo Rio Grande do Sul, Brasiliae (RICK).— Teste Rehm *Nectriae Pandani* Tul. affinis.

8. **Nectria fusco-purpurea** Wakefield, Bull. Misc. Inform. Kew 1918, 545

p. 232.— Stromatibus dilute lateritiis, ceraceis, applanatis, 4-8 mm. long. 1-2 mm. latis, per rimas transversas corticis erumpentibus, primo conidia gerentibus; conidiis cylindraceis, utrinque obtusis vix curvulis 8-11 × 2-2,5; conidiophoris simplicibus v. ramosis hyalinis 1,5-2 μ diam. Peritheciis dense constipatis compressione laterali deformibus, stromatibus obscuratis, sessilibus, fusco-purpureis, carnosulis, contextu parenchymatico rubro, sicco collapsis pezizoideis, rugulosis, 0,25 mm. diam., ostiolo minuto pertusis; ascis cylindraceis, octosporis, 80-90 × 10-12; paraphysibus filiformibus, ramosis, hyalinis, 1,5 μ diam.; sporis monostichis v. subdistichis, variabilibus oblongis, utrinque obtusis, medio 1-septatis, interdum 2-3 septatis, ad septa constrictis, 14-33 × 4,5-8,5.

Hab. ad ramos emortuos Pruni domesticae (Rosaceae) cultae (« Pond's Seedling »), Wisbech, Anglia (J. C. F. Fryer, A. D. Cotton).

9. **Nectria Jodinae** Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires, XXIII, p. 74 (1912). — Peritheciis hinc inde gregariis vel caespitosis in stromatibus vetustis *Tuberculariae Jodinae* Speg., udis globosis, siccis eximie cupulato-collapsis, 200 μ diam., membranaceis, primo albo-farinosulis dein nudis succineis, contextu parenchymatico melleo, circa ostiolum minore ac fuscescente; ascis cylindraceis, apice obtuse rotundatis, basi breviter pedicellatis, 80-100 × 10-15, aparaphysatis vel pseudoparaphysibus parcissimis commixtis; sporidiis oblique monostichis, ellipsoideo-cylindraceis, utrinque obtuse rotundatis, medio septatis, vix constrictis, hyalinis, 14-16 × 6-7, loculis grosse 1-guttatis. 5460

Hab. in ramis dejectis putrescentibus Jodinae rhombifoliae (Santalaceae), in horto La Plata, Argentina.

10. **Nectria badia** A. Maublanc, Bull. Soc. Mycol. de Fr., XXXVI, 1920, p. 35, tab. II fig. 12-17. — Mycelio in stromatibus vetustis *Phyllachorae subintermediae* evoluto, ex hyphis dense aggregatis formato; stromatibus erumpentibus, exsertis, pulvinatis, minutis, 0,5-1,5 mm. diam., badiis, textura coriaceo-carnosa, hyphis parallelis; peritheciis subsuperficialibus, concoloribus, sphaeroideis, gregariis, minutis (circ. 150 μ diam.), sicco collabescentibus, apice pertusis, superficie pilis hyalinis, brevibus, velutinis, contextu minute celluloso; ascis clavatis v. subfusoideis, fere sessilibus, obtusis, diffluentibus, 55-70 × 12-16,8-sporis; sporidiis distichis v. fere conglobatis, oblongis v. fusoideo-clavatove oblongis, utrinque attenuato-obtusis, medio v. prope medium 1-septatis, leniter constrictis, hyalinis, 20- 5461

30 × 4,5-7 ; acervulis conidiophoris in eisdem stromatibus evolutis, subcupulatis, albidis ; conidiis fusoideo-oblongis, rectis, obtusiusculis, hyalinis, continuis, dein medio 1-septatis, non constrictis, 15-25 × 3,5-4, in basidiis acicularibus, simplicibus, usque ad 100 μ longis, 1,5-2 μ crassis, densis acrogenis.

Hab. in foliis Sapindaceae cujusdam, Niteroy, Brasiliae (Herb. Mus. R. Jan).

11. **Nectria Cainitonis** P. Henn., Hedw., vol. 48. (1908) p. 104. — Peri- 5462
theciis caespitose erumpentibus, subglobosis, cinnabarinis, granulato-verrucosis, 180-200 μ diam., obtuse papillatis ; ascis clavatis, obtusis, octosporis, 60-70 × 8-11 ; sporidiis monostichis vel subdistichis, ovoideis vel subfusoideis, utrinque obtusis, medio 1-septatis, 2-4-guttulatis, hyalinis, 10-18 × 4-5.

Hab. in corticibus Lucumae Cainitonis (Sapotaceae), hort. botan. Goeldi, Parà, Brasiliae (Baker).

12. **Nectria inventa** Pethybridge, Trans. Brit. Mycol. Soc. 6., P. II, 5463
1918, p. 107, tab. III, fig. 1-5. — Peritheciis gregariis, globosis, atro-rufis, superiore parte pilosis, 300-500 μ diam., paraphysibus filiformibus dein obsoletis, 150 × 3-4 ; ascis cylindricis, vel cylindraceo-clavatis, 60-100 × 4-6, octosporis ; sporidiis monostichis, oblongis, hyalinis, 1-septatis, 9-10 × 4-5.

Hab. in tuberibus putresc. Solani tuberosi (Solanaceae), in Hirbernia. — Status conid. sistit *Verticillii cinnabarini* R. et B. (*Acrostalagmi cinnabarini* Corda).

13. **Nectria cinnabarina** Fr. — Syll. II, p. 479 — var. **effusa** Theissen, 5464
Ann. Mycol. IX, 1911, p. 52, tab. VII fig. 74. — Stroma late effusum cinnabarinum ; peritheciis 300-400 μ diam. globosis, minute papillatis, arcte aggregatis ; ascis 80-100 × 8-12 cylindraceis, hinc inde ventricose dilatatis ; sporidiis monostichis v. imbricate distichis, oblongis, 18-24 × 7-8,5, longitudinaliter striatis, utrinque rotundatis, non v. vix constrictis, paraphysibus ramosis, guttatis, 2-2,5 μ crassis.

Hab. in cortice cujusdam, Rio Grande do Sul, Brasiliae (Rick).— A typo differt stromatibus horizontaliter effusis, colore vividiore sporisque majoribus. — var. **Daphnes** Rehm, Ann. Mycol. XIII, 1915, p. 2.

Hab. ad Daphnem Mezereum emortuam (Thymeleaceae), Ruckberg prope Renbendorf-Rhön, Franconiae (Ade).

14. **Nectria coccinea** (Pers.) Fr. — Syll. II p. 481. — var. **sordidula** 5465
Sacc., Notae Mycol. XXII p. 190 (R. Accad. Pàd. 1917). Distinguitur

peritheciis sordide coccineis, saepe collabescentibus, modo caespitulosis, modo subsparsis; ascis 38-40 × 9-10; sporidiis oblongis, leviter constrictis, 10-12,6 × 3-4, hyalinis, (hinc quam in typo paullo angustioribus; nec 2-guttatis visis).

Hab. in corticibus subvivis, Filfil, Erythraea, Africae.

15. **Nectria flavido-carnea** Rehm, Ascom. Philippin. VII, in Leaflt. of Philippin. Bot. VIII, 1916, p. 2922. — Perithecia 20 botryose arcte congregata in acervulis 1-2 mm. latis, superficialia, globulosa, 0,15-0,2 mm. lata, citrino-flavida, glabra, minutissime papillulata, ad basim hyphis hyalinis, 30-100 × 3 obsessa, sicca collabentia, dilute carneola, albido-pruinosa. Ascis cylindraceo-clavatis, circa 80 × 15 8-sporis; sporis oblongis utrinque obtusis, medio septatis non constrictis, utraque cellula magniguttata, 20 × 8, 1-3-stichis. Paraphysibus nullis. Ad basim conidia sporarum formae 8 × 4,5 in hyphis brevibus. 5466

Hab. ad sarmentum emortuum, Los Baños, Ins. Philipp. (C. F. Baker). — *Nectriae pityrodes* Mont. proxima.

16. **Nectria conferta** Syd., Engler Bot. Jahrbüch. 54., 1916, p. 255. — Peritheciis in tumoribus matricis minutis dense confertis, stromate nullo, superficialibus, cinnabarinis, in sicco collapsis, globulosis, 160-200 μ diam., glabris, levibus, ubique parenchymatice ex cellulis angulato-globosis vel ellipsoideis 15-20 μ longis 10-15 μ latis, tenue tunicatis (membrana 1,5-2 μ crassa) compositis, pariete ca. 20 μ crasso, vertice papilla hyalina distincte radiato-fibrosa humili ca. 25 μ alta et 35-40 μ lata praeditis, basi hyphis paucis tenuibus suffultis; ascis clavatis, tenue tunicatis, sessilibus, filiformiter paraphysatis, 32-45 × 9-12, octosporis; sporidiis oblique monostichis vel pro parte distichis, ellipsoideis vel oblongo-ellipsoideis, utrinque obtuse attenuatis, saepe etiam vix attenuatis, medio distincte septatis non constrictis, hyalinis, tenuissime striatis, 10-12 × 5-6. 5467

Hab. ad corticem emort. arboris cujusdam, prope Sepik, Nova Guinea Nord-or., Africae (Ledermann).

17. **Nectria gallifera** Pat., Bull. Mycol. de Fr., 1913, p. 225. — Stromate minuto e cortice erumpente, duro, perithecis 2-8-aggregatis efformato; peritheciis globosis basi attenuatis v. turbinatis, convexis, papillato-ostiolatis dein collabescentibus et cupuliformibus, laxe obtuseque asperulo-rugosis, pallide carneis, stromate obscuriore quandoque brunnescenti; nucleo rubro; ascis longe stipitatis, octosporis; sporidiis pallide roseis, levibus rectis v. curvatis, uniseptatis, septo vix constrictulis, magnis, 22-27 × 8-10; trama e cel- 5468

lulis carneis, angulosis circ. 10 μ diam. efformata.

Hab. ad cortices emortuas, Chi Nè, Tonkin Cina, Asia (Duport). — Perithecia saepe plus minus abnormiter galliformiter inflata animalculorum ope quorundorum.

18. **Nectria striatula** H. S. Yates, Philipp. Journ. Sc. XII (1917) p. 373. — Stromatibus corticalibus, sanguineis, suborbicularibus, erumpentibus, 0,5-1 mm. diam., contextu aurantiaceis, parenchymaticis; perithecis 3-12 in quoque stromate, subglobosis 150-300 μ diam., ostiolis papillatis; ascis cylindraceis, 100 × 8, octosporis, evanescentibus, aparaphysatis; sporis monostichis, ellipsoideis, utrinque obtusis, ad medium 1-septatis, non constrictis, olivaceis, membrana longitudinaliter striolata praeditis. 546

Hab. in trunco emortuo speciei indeterminatae, in silvis pr. Sangirin Alabat, Ins. Philipp. (Merrill).

II. *Dialonectria*

19. **Nectria bomba** T. Petch, Hypocr. zeyl. in Ann. R. Bot. Gard. Peradeniya v. 7., P. II, 1920, p. 127. — Perithecis sparsis v. confertis stromate destitutis, rubro, latericiis, opacis minutissime rugosulis, quandoque minutissime flavo-granulatis; ostiolo conoideo in area rubra insidenti, demum nigrescenti; parietibus crassis pseudoparenchymaticis et e cellulis infra usque 12 μ diam. supra plus minus obscuris et opacis; ascis primum subcylindraceis apice truncatis, circ. 80 × 8, octosporis; ascis et paraphysibus mox diffluentibus subgelatinosis; sporidiis oblique monostichis e ovoideis cymbiformibus leniter v. non constrictis, apicibus obtusis, 10-16 × 4,5-6. 547

Hab. ad truncum emortuum Heveae (Euphorbiaceae), Peradeniya Ceylon, Asia.

20. **Nectria calonectricola** P. Henn., Hedw, vol. 48. (1908) p. 105. — Perithecis sparsis vel gregariis, in caespitulis *Calonectriae* parasiticis, ovoideis vel subglobosis, cinnabarinis, papillatis, 170-200 μ diam.; ascis cylindraceo-clavatis, obtusis, octosporis, 55-60 × 5-7; sporidiis oblique monostichis vel subdistichis, ellipsoideis, utrinque rotundatis, 1-septatis, hyalinis, 8-12 × 4-5. 547

Hab. in Calonectria (Fungi) ad Hibiscum schizopetalum (Malvaceae), hort. botan. Goeldi, Parà, Brasilia (Baker).

21. **Nectria perpusilla** Sacc., Ann. Mycol. XI, 1913, p. 546. — Parasitica, perexigua: peritheciis globoso-conoideis, 70-80 μ lat., 84-90 μ alt., sordide roseis, glabris, ostiolo non emergente, periphysato praeditis, basi hyphulis mycelialibus cinctis; contextu tenerrimo, 547

laxe parenchymatico; ascis rosulatis, fusoideis, 40 × 14, sensim brevissime pedicellatis, octosporis, apice rotundatis; sporidiis distichis, medio subtristichis, tereti oblongis, utrinque rotundatis, rectis, levibus, 11-12 × 3, hyalinis.

Hab. parasitice in thallo *Meliolae clavulatae* (Fungi), ad folia Ipomoeae sp. (Convolvulaceae), Oaxaca, Mexico (BONANSEA).

22. **Nectria Meliolae** (Syd.) Saccardo, *Epinectria* (n. gen.) *Meliolae* Syd., Ann. Mycol. 15., 1917, p. 215. — In mycelio Meliolae parasitica; mycelium parce evolutum, ex hyphis hyalinis usque pallide flavidulis subflexuosis 2-4 μ crassis remote septatis compositum; perithecia plerumque gregaria, sed discreta globosa, 90-140 μ diam., superficie (mox parce mox copiosius) hyphis subhyalinis brevibus obtusis 3-4 μ crassis obsessa, primitus hyalino-flavidula, dein succinea, poro minuto aegre perspicuo, pariete ca. 10 μ crasso irregulariter parenchymatice contexta, paraphyses genuinae nullae; asci sessiles subfusoidei vel cylindracei, 25-30 × 5-7, octospori; sporae plerumque oblique monostichae, cylindraceae vel oblongae, utrinque obtusae, hyalinae, medio septatae, non constrictae, 9-10 × 1,5-2. 5473

Hab. parasitica in mycelio Meliolae, aff. *M. substenosporae*, (Fungi), ad folia graminis cujusdam, Sorsegon, Luzon, Ins. Philipp. (M. RAMOS).

23. **Nectria poricola** Theissen, Ann. Mycol. IX, 1911, p. 53. — Peritheciis solitariis, ad os tubulorum Poriae vetustae nidulantibus, aurantiacis, globosis, circ. 240 μ diam., leniter floccosulis, poro imperspicuo; ascis cylindraceis, breviter pedicellatis, 80-90 × 6-7; sporidiis hyalinis, monostichis, ellipsoideo-oblongis, utrinque angustatis, non constrictis, episporio distincte verrucoso, 15-18 × 5-6, rectis v. subinaequilateralibus. 5471

Hab. in hymenio Poriae sp. (Fungi), vetustae, Rio Grande do Sul, Brasiliae.

24. **Nectria discoidea** T. Petch, Hypocr. zeyl. in Ann. R. Bot.-Gard. Peradeniya v. 7., P. II, 1920, p. 126. — Peritheciis sparsis superficialibus, pallide brunneis, opacis collabescentibus et demum discoideis, 0,2 mm. diam., centro depressis levibus; parietibus tenuibus pseudoparenchymaticis et e cellulis usque 12 μ latis crasse tunicatis, luce trasmissa pallide brunneis, ostiolo non prominenti; ascis clavatis, octosporis, 35-45 × 6-8; sporidiis oblique monostichis v. distichis, hyalinis anguste ovoideis, utrinque obtusis, 1-septatis septo non constrictis, levibus, 10-14 × 3,5-4. 5475

Hab. ad Xylariam (Fungi) vetustam, Hakgala Ceylon, Asia.

25. **Nectria lecanodes** Ces. — Syll. II p. 499 — var. **euryspora** Vouaux, Bull. Soc. Mycol. de Fr., 1912, p. 188. — Peritheciis magis sphaeroideis quam in typo, non collabescentibus; ascis 60-70 × 9-10, octosporis; sporidiis monostichis latioribus quam in typo, 10-12 × 6-7, grosse biguttulatis. 5476

Hab. in Pannaria plumbea (Lichenes), Mons Hèrault, Gallia (A. DE CROZALS).

26. **Nectria Spegazzinii** Vouaux, Bull. Soc. Mycol. de Fr., 1912, p. 189.— Ita dicatur *Nectria lichenicola* Spegazzini, non *N. lichenicola* (Ces.) Sacc., Syll. II p. 498. 5477

27. **Nectria Verrucariae** Vouaux, Bull. Soc. Mycol. de Fr., 1912, p. 186.— Peritheciis sparsis v. subgregariis thallo omnino immersis vix prominulis rubro-aurantiacis, papillula minuta mox nigrescente auctis, sphaeroideis 150-200 μ diam., ostiolo periphysibus rectis brevibus septatis praedito; contextu crasso, cellulis aurantiacis parum distinctis guttulis oleosis aurantiacis farctis; ascis cylindraceo-fusoideis, utrinque fortiter acutatis, basi breviter nodulosis, plerumque oblique tetrasporis saepe etiam bisporis, rarissime esasporis, 59-62 × 9-11; paraphysibus bifurcatis pluriguttulatis mox evanidis; sporidiis oblongo-fusoideis, utrinque attenuatis sed obtusis, saepe inaequilateris, hyalinis, 1-septato-constrictulis, quadri- v. biguttulatis 17-20,5 × 7. 5478

Hab. in thallo Verrucariae integrae (Lichenes), ad saxa calcaria, Dunkerque, Gallia bor. (BOULY DE LESDAIN).

28. **Nectria variabilis** Hara, Bot. Mag. Tokyo v. 28., 1914, n. 332, cum icon. — Sporodochiis irregulariter errumpentibus, rubro-aurantiacis v. roseis, plerumque 1-2 (raro 3) 0,5-1 mm. diam.; conidiophoris filiformibus, septatis, basi ramosis, 2,5-3 μ cr.; sporis fusariformibus, hyalinis, 3-5-septatis, 60-70 × 5-6; paraphysibus filiformibus, hyalinis, septatis, 2-2,5 μ cr.; peritheciis stromaticis v. basi sporodochiorum ortis, globosis v. ellipsoideis, ostiolo papillato praeditis, solitariis v. caespitosis, levibus, carneis, membranaceis, rubro-aurantiacis, 270-300 μ diam.; ascis cylindraceo-clavatis, apice rotundatis, stipitatis, octosporis, 130-150 × 11-13; sporis monostichis, fusoideis v. ellipsoideis, 1-septatis, septo non v. leniter constrictis, 16-22 × 6-9, hyalinis v. flavis; paraphysibus filiformibus 1-1,5 μ cr. 5479

Hab. in Coccidiis (Insecta) Sasam paniculatam (Graminaceae) infestantibus, Kawauye-mura, pr. Mino, Japonia.

29. **Nectria Leucaenae** Rehm, Ascom. Philippin. VII, in Leafit. of Phi- 5480

lippin. Bot. VIII, 1916 p. 2923. — Perithecia gregaria, plerumque in maculis epidermidis albidulis sessilia, globulosa, glabra, minutissime papillulata, demum umbilicata, 0,2 mm. lata, ferrugineo-rubra, parenchymatice contexta, cellulis-20 μ latis; ascis cylindraceo-clavatis, 70 × 10-12, 8-sporis; sporis ellipsoideis, medio septatis, non constrictis, hyalinis, 10 × 5, 2-stichis; paraphysibus nullis.

Hab. ad emortuam Leucaenam glaucam (Leguminosae), Los Baños, Ins. Philipp. (M. B. RAIMUNDO). — *Nectriae Bulbophylli* P. Henn. proxima.

30. **Nectria flageoletiana** Sacc., Notae Mycol. XXII (R. Acc. Pad.) 1917, 5481
p. 161. — Peritheciis hinc inde dense gregariis, superficialibus, globoso-depressis, umbilicatis (*Pezizellae* ad instar) glabris, levibus, nitidulis, amoene dilute roseis, centro paullo saturatioribus, 400 μ diam., carnosulis; contextu parenchymatico dilute flavido-roseo; ostiolo exiguo, impresso; ascis fusoideis, basi breviter tenuatis, apice summo obtusulis, lumineque bifoveolatis, obsolete paraphysatis, octosporis, 55-58 × 4,7-5; sporidiis oblique monostichis v. subdistichis, breviter fusoideis, rectis curvulisve utrinque obtusulis, medio obsolete 1-septatis, non constrictis.

Hab. in ramulis corticatis Pruni Laurocerasi (Rosaceae) emortuis, Rigny, Gallia (FLAGEOLET). — Socia adest commixta forma *Turbercularíae granulatae* Pers. quae sine dubio st. conidicum ejusdem sistit.

31. **Nectria Theobromae** Massee, Bull. Bot. Garden Kew. 1908, p. 5482
218. — Peritheciis gregariis vel sparsis, superficialibus, ovatis, 0,5 mm. altis, levibus, glabris, aurantiaco-rubescentibus, ostiolo minuto vix prominulo hiante; ascis cylindraceis, pedicellatis, octosporis; paraphysibus septatis, ascos excedentibus, hyalinis, apice vix incrassatis, interdum flexuosis, 3 μ cr.; sporidiis oblique monostichis, hyalinis, ellipsoideis, 1-septatis, ad septum subconstrictis, 28-30 × 8-10.

Hab. in areis sanguinulentis corticis Thebromae Cacao (Sterculiaceae), Grenada, Indiae occid. (HOWARD). — A *N. Bainii* Mass. facile distincta.

32. **Nectria cancri** Rutgers, Ann. Jard. Bot. Buitenz. 1913, p. 2 t. I 5483
p. 62, *Hypomyces cancri* (Rutg.) Wollenw., Journ. Agric. research II p. 271 t. XIII f. J. et XV f. B. C. — Peritheciis gregariis globulosis asperis vertice conicis levibus, 350-450 μ altis, 275-375 μ cr.; sporidiis 10-15 × 5-6,7; conidiis (*Fusarium*) 3-septatis 30-45-3,7-5; rarius 4-5-septatis 30-55 × 3,7-5,5.

Hab. in cortice canceroso Theobromae Cacao (Sterculiaceae), Java, et radicibus Cannabidis sativae (Moraceae), in Amer. bor. — Diagnosis imperfecta ex Wollenweber. — Affinis dicitur *Nectr. Ipomoeae* Hals.

33. **Nectria pyrosphaera** Maire. Bull. Soc. H. N. de l'Afrique du Nord 5484
VIII, 1917, p. 80, fig. 4. — Peritheciis sparsis v. gregariis, semper discretis, sphaericis, 350-550 μ diam., levibus, glabris, aurantio-rubris, contextu pseudoparenchymatico, ostiolo papillato punctiformi, albido vix conspicuo, nucleo cirrisque albis; ascis 8-sporis, cylindraceis, subsessilibus, 75-110 × 7-9, paraphysibus nullis; sporidiis oblique monostichis, hyalinis, ellipsoideis, longitudinaliter striatis, medio septatis, ad septum non constrictis, 10-14 × 5-6, loculis 1-guttulatis; conidiophoris (in culturis evolutis) acremoniiformibus, laxis, basi septatis, subulatis, 30-80 × 2,5-3; conidiis solitarie acrogenis, oblongo-ellipsoideis, hyalinis levibus, subinaequilateris, 6-8 × 3-3,5.

Hab. in ligno putri Ulmi campestris (Ulmaceae) et Populi albae (Salicaceae), in Mauretania (Algeria). — Peritheciis perfecte sphaericis igneis (unde nomen) notabilis species.

34. **Nectria Berkeleyi** v. Höhn., Fragm. z. Mykol. 733, Stzsb. Akad. 5485
Wiss. Wien CXXI, 1, p. 355 (1912). — Hypostromate tenui, pallido, minute pseudoparenchymatico, erumpente; peritheciis singulis vel paucis, vel etiam 5-20 botryose acervatis, siccis rubro-ochraceis vel pallide incarnatis, globosis, non collabentibus vel in centro umbilicatis, 400-500 μ latis, ostiolo minuto subapplanato 28 μ lato, circumcirca verrucis acutiusculis 60 μ altis et 100 μ latis asperato, excipulo 60 μ crasso, bistratoso; ascis clavatis, sessilibus, aparaphysatis, octosporis, 90 × 20; sporidiis ellipsoideo-oblongis, inaequilateris, utrinque rotundatis, ad septum non constrictis, 22-30 × 8-9,5.

Hab. in corticibus, Ceylon (Berk. et Br. Fungi of Ceylon, n. 1027 sub *N. pityrodes* Mont.) — *N. Ralfsii* Bk. et Br. affinis.

35. **Nectria Lesdaini** Vouaux, Bull. Soc. Bot. Fr. LIX (1912) p. 15. — 5486
Peritheciis fere superficialibus, sparsis, pulchre rubris, distincte piriformibus, 120-230 μ latis, 200-350 μ altis, ostiolo simplici pertusis, contextu tenui pseudoparenchymatico, interdum senescendo nigrescentibus et collabescentibus; ascis cylindraceis, breviter stipitatis, octosporis, 75-90 × 5-6, paraphysibus brevibus, simplicibus vel furcatis, parce septatis, facile diffluentibus; sporidiis monostichis, ellipsoideis vel ovatis, hyalinis, 1-septatis, non vel vix constrictis, 9-10 × 3,5-5.

Hab. in membrana, « linoleo » dicto, Versailles, Gallia. — A *N. charticola* (Fuck.) peritheciis fere superficialibus nec non sporidiis multo minoribus differt.

36. **Nectria polita** Theissen, Ann. Mycol. IX, 1911, p. 53., tab. V fig. 21, VI fig. 56-57. - Peritheciis laxe gregariis, globoso-piriformibus, circ. 300-380 µ diam., laete rubris, glaberrimis, vertice late conico, circa ostiolum zona obscure brunnea nitenti pulchre cinctis ; ascis cylindraceis, dilutissimis, breviter pedicellatis, supra rotundatis, p. sp. 65-72 × 8-9,5 ; sporis monostichis, hyalinis, ellipsoideis, rotundatis, episporio minutissime verruculoso, 10-12 × 5, medio non constrictis. 5487

Hab. in ramis nodosis plantae ignotae, Rio Grande do Sul, Brasiliae. — Species superficie fere artificiose polita, pulchre dichroa, vertice nitenti distincta. Externis similis *N. striatosporae* Zimm. peritheciis tamen glaberrimis sporisque recedens.

37. **Nectria Peziza** (Tode) Fr.— Sacc. Syll. Fung. II p. 501.— Subsp. **reyesiana** Sacc., Ann. Mycol. XII, 1914, p. 305. - Peritheciis gregariis, globoso-discoideis, carneis, 175-190 µ diam., hyphis byssinis albis cinctis, junioribus minoribus et tantum depressis, maturis umbilicato-concavis, centro papillatis; ascis cylindraceis apice rotundatis, bifoveolatis, 50-60 × 6, octosporis, subsessilibus, paraphysibus obsoletis ; sporidiis oblique monostichis, elliptico-ovoideis, 9-10 × 4,5, 1-septatis vix constrictis, hyalinis. 5488

Hab. ad corticem emortuum indeterm., Los Baños, Luzon, Ins. Philippin. (S. A. Reyes).

38. **Nectria innata** Theissen, Ann. Mycol. IX, 1911, p. 50, tab. V fig. 13, VI fig. 60. — Peritheciis solitariis v. paucis (2-5) stromatice junctis, prorumpentibus, basi semper innatis, globoso-piriformibus 400-500 µ diam., primo rubro-ferrugineis, mox brunneo-rubris, asperulis, vertice subapplanatis, annulo tumidulo atro-sanguineo cinctis, ostiolo pertusis ; ascis ventricoso-elongatis, breviter pedicellatis, supra late rotundatis, p. sp. 100-115 × 20-25; sporis monostichis v. distichis, hyalinis, ellipsoideis, utrinque rotundatis, leniter inaequilateralibus v. curvulis, medio non v. vix constrictis, plerumque irregulariter guttatis, typice guttis duabus grossis globosis praeditis, 30-38 × 12-14. 5489

Hab. ad lignum corticatum, Saô Leopoldo, Rio Grande do Sul, Brasiliae (Rick).

39. **Nectria confusa** v. Höhn., Fragm. zur Mykol. 753, in Sitzgsb. Akad. Wiss. Wien CXXI, 1, p. 372 (1912). — Hypostromate tenui, pallido, 5490

minute parenchymatico, sub peridermio effuso; perithecis singulis vel paucis, saepe dense seriatis vel in acervulos 1-2 mm. latis, planis congestis, albidulis vel luteolis (in sicco) irregulariter lobato-tuberculosis vel plerumque lobis 3-5 rotundatis, 120 μ circ. latis et longis, circa ostiolum applanatum, 30 μ circ. latum, regulariter ordinatis praeditis, 260 μ latis, ovoideis, excipulo bistratoso, 45 μ circ. crasso, superne protuberantiis 3-5 applanatis, 70-80 μ altis, 100-120 μ latis, inferne papillis verruciformibus praeditis; periphysibus in ostiolo copiosis, gracillimis; ascis clavatis, sessilibus, apice conoideo-attenuatis, 70-85 × 12, aparaphysatis; sporidiis distichis, diu continuis, demum tenuiter septatis, non constrictis, ellipsoideo-fusoideis, utrinque rotundato-attenuatis, 17-22 × 7-8.

Hab. in corticibus, Ceylon, Asia (THWAITES).

III. *Hyphonectria.* — (Cfr. *Nectriopsis* Maire)

40. **Nectria albofulta** T. Petch, Hypocr. zeyl. in Ann. R. Bot. Gard. Peradeniya v. 7., P. II, 1920, p. 128. — Perithecis globosis v. late conoideis, sparsis v. in parvos greges dispositis e subiculo albo-byssino bene evoluto ortis, minutis, 0,15 mm. diam., e rubro-flavescentibus rubro-sanguineis, translucidis, minutissime rugosulis, ostiolo minuto conoideo praeditis; tunica perithecii tenui e cellulis latis efformata, cellulis externis quandoque longe conoideo prominentibus et usque 30 μ long.; ascis clavatis breviter pedicellatis octosporis, 45-50 × 7-8; sporidiis e anguste ovoideis subfusoideis, 1 septatis septo leniter constrictis, utrinque obtusis, 9-11 × 3-4,5. 5491

Hab. ad ramos emortuos Beloperones oblongatae (Acanthaceae), Peradeniya Ceylon, Asia.

41. **Nectria sphaeriophila** Theissen, Ann. Mycol. IX, 1911, p. 51, tab. V fig. 16, VII fig. 69. — Miniato cinnabarina. Perithecis stromate parco, late effuso junctis, arctissime congregatis, stratum compactum, continuum efformantibus, 120-170 μ diam., obsolete papillatis, minute verruculosis; ascis dilutissimis, tenuibus, modice pedicellatis, p. sp. 52-56 × 6-7; sporidiis oblongis, hyalinis, leviter curvatis medio septatis, non constrictis, utrinque rotundatis, cellula inferiore saepe paullo latiore, 15-16 × 3. 5492

Hab. in ligno marcescenti parasitica ad stroma Sphaeriaceae (Fungi) cujusdam, Sao Leopoldo, Rio Grande do Sul, Brasilia (RICK). — Differt a *N. episphaeria* modo crescendi fabrica et modis sporarum; a *N. punicea* perithecis minoribus, non pulvinatim aggregatis, obscurioribus.

42. **Nectria sydowiana** Theissen, Ann. Mycol. IX, 1911, p. 48. tab. V fig. 11-12. — Peritheciis sparsis, bysso tenui albido orbiculariter determinato insidentibus, globosis v. doliiformibus, albido-fuscidulis, circ. 260 × 220-240, apice corona albida discoidea, plana, compactiuscula, ex hyphis hyalinis dense intricatis formata cincto, ostiolo pertusis; ascis cylindraceis 70-76 × 8-10 breviter pedicellatis; sporis distichis, flavidulis, fusoideis, utrinque acutatis, rectis v. curvulis, ad septum medium non constrictis, 32-48 × 4. 5493

Hab. ad ramos Bambusaceæ (Graminaceae), Sao Leopoldo, Rio Grande do Sul, Brasiliae (Rick). — Ob caracteribus sporarum *Nec. abnormis* P. Henn. et *N. subfalcatae* P. Henn. proxima sed peritheciis diversa.

43. **Nectria tjibodensis** Penz. et Sacc. — Syll. XIV p. 636 — var. **Gliricidiae** Rehm, Ascom. Philippin. VII, in Leaflt. of Philippin. Bot. VIII, 1916, p. 2922. — A typo differt peritheciis e mycelio albidulo subcorticali late expanso caespitose crumpentibus, flave fuscidulis, fusce papillulatis. 5494

Hab. ad Gliricidiam sepium (Leguminosae), Los Baños, Ins. Philippin. (M. B. Raimundo).

44. **Nectria muscicola** Sacc., Ann. Mycol. XI, 1913, p. 416. — Peritheciis sparsis, epiphyllis, perexiguis, 150-200 μ diam., carnosulis, globulosis, superficialibus, rubris, non papillatis, praeter areolam circularem planam, glabram albo-pilosulis, ostiolo rotundo (inclusis periphysibus 18-20 × 2-3) 45-55 μ diam.; contextu ex cellulis tenerrimis parenchymaticis, parum distinctis formato; ascis cylindraceis, v. cylindracco-clavatis, 70 × 5,5-6,5, octosporis, non v. indistincte paraphysatis, deorsum modice tenuatis; sporidiis monostichis v. apice distichis ellipsoideo oblongulis, utrinque rotundatis, tenuiter 1-septatis, non vel vix constrictis, hyalinis, 8,5-9 × 4,5-5. 5495

Hab. in foliis subvivis Muscorum (Barbulae sp.), Mescia pr. Tripoli, Africa bor. — Peritheeii pili tereti-subclavati, continui, hyalini, 40-50 × 2,5-3,5. A speciebus bryophilis facile distinguenda; videtur parasitica.

45. **Nectria Citri** P. Henn., Hedw. vol. 48. (1908) p. 104. — Maculis mycelii cretaceis vel isabellinis; hyphis septatis, ramosis, 3-5 μ cr., hyalinis, conidiis falcatis, 40-80 × 5-7, 3-7-septatis, hyalinis (*Fusarium*); peritheciis gregariis, subglobosis, collabentibus, coccineis, squamulosis, 170-200 μ diam.; ascis clavatis, obtusis, octosporis, 45-60 × 7-11; sporidiis oblique monostichis v. subdistichis, ellipsoideis, 2-guttulatis, 1-septatis, constrictiusculis, flavidulis, 11-14 × 5-7. 5496

Hab. in corticibus Citri Aurantium (Rutaceae), hort. botan. Goeldi, Parà, Brasilia (Baker).

46. **Nectria Bainii** Massee (1899) — Sacc. Syll. XVI p. 579. — Var. **hypoleuca** Sacc., Notae Mycol. XX, Nuovo Giorn. bot. it., N. S., 23., 1916, p. 205.— Subiculo late effuso albo v. albido, tomentoso, nunquam flavo v. aurantiaco: cetera vix diversa; perithecia rarius senio leviter collabentia; sporidia 11-12 × 4,5, diu continua, dein 1-septata non constricta. 5497

Hab. in fructibus junioribus, qui necantur Theobromae Cacao (Sterculiaceae), Los Baños, Ins. Philipp. — Socia adsunt *Mycogone cervina* v. *Theobromae* et *Fusarium Theobromae* App. et Strunk.

47. **Nectria huberiana** P. Henn., Hedw. vol. 48. (1908) p. 104. — Mycelio maculiformi. flavo-pallescente, subcretaceo; peritheciis gregariis, subglobosis, rubris, levibus, 180-240 μ diam., ascis cylindraceo-clavatis, obtuse rotundatis, octosporis, 50-80 × 9-12; sporidiis oblique monostichis vel subdistichis, oblongo-ellipsoideis, utrinque obtusis, curvulis, granulatis, hyalinis, 1-septatis, 16-25 × 6-8. 5498

Hab. in fructibus Theobromae longiflorae (Sterculiaceae), hort. bot. Goeldi, Parà, Brasiliae (Huber).— Sporidiis majoribus obtusiusculis a *N. Bainii* Mass. et *N. camerunense* App. et Str. distincta sed eis similis et affinis.

IV. *Lepido-lasionectria*

48. **Nectria chrysolepis** Pat., Bull. Soc. Mycol. de Fr. 1913, p. 224.— Superficiali, stromate nullo, solitaria v. gregaria sed caespitosa; peritheciis globosis 300 μ circ. diam., rubro-aurantiacis, verrucis subpyramidatis flavo-auratis tectis, dein aurantiacis, 60 μ circ. altis, e cellulis magnis 12-30 μ angulosis v. rotundatis efformatis, crasse tunicatis: contextu carnoso concolori grosse parenchymatico; ostiolo papilliformi; ascis octosporis, circ. 90 × 8; sporidiis ovoideis, obtusis, septo non v. parum constrictis, biguttulatis, levibus, 12 × 6. 5499

Hab. in ligno denudato, Hanoi Tonkin Cina, Asia (Dupont).

49. **Nectria albicans** Starb. — Syll. XVI p. 577 — Var. **microspora** Theiss., Ann. Mycol. IX, 1911, p. 48. — A typo recedit sporidiis minoribus, 18-25 × 6,5-7. 5500

Hab. in cortice arboris ignoti, Rio Grande do Sul, Brasiliae.

50. **Nectria sulcispora** T. Petch, Hypocr. zeyl. in Ann. R. Bot. Gard. Peradeniya v. 7., P. II, 1920, p. 129 (Lasionectria). — Peritheciis sparsis, superficialibus, late conoideis, 0,2 mm. diam. 0,15 mm. altis non collabescentibus, ostiolo papillato et hyphis albis floccosis prae- 5501

dito, obscure flavo-brunneis, parietibus pseudoparenchymaticis pallide brunneis ex cellulis parvis crasse tunicatis efformatis; asci clavatis octosporis, 50-60 × 10-12; sporidiis oblique monostichis v. distichis, ovoideis, hyalinis 1 septatis non constrictis, oblique longitudinaliterque sulcatis, 10-13 × 4-6.

Hab. in Xylaria (Fungi), vetusta, Hakgala Ceylon, Asia.

NEOHENNINGSIA Koord. — Syll. XXII p. 474.

1. **Neohenningsia confluens** T. Petch. Hypocr. zeyl. in R. Bot. Gard. Peradeniya v. 7., P. II, 1920, p. 130 et 114. — Peritheciis circ. 0,35 mm. diam., primum rubro-brunneis subtranslucidis demum ochraceis et opacis extus pruinosis, hyphis conoideo-fasciculatis usque 100 μ long., sparsis praeditis, demum deciduis, parietibus in stratu externo parum conspicuo et cellulis parvis efformato externo cellulis latioribus; sporidiis 10-12 × 5, tenuiter tunicatis. 5502

Hab. in ramis emortuis, Ceylon, Asia. — *N. suffultae* proxima, cum qua antea confusa.

NEONECTRIA Wollenweber, Ann. Mycol. 15., 1917, p. 52. — Peritheciis contextu et forma fere Nectriae (sect. ex gr. Willkommiotes Wr., Phytopathology, 3., 1913, p. 226), singulis v. gregariis, lacto colore; sporidiis tenuibus Mycosphaerellae similibus ellipsoideis, 1-pluriseptatis; conidiis cylindraceis Ramulariam referentibus, chlamydosporis intercalaribus.

1. **Neonectria Ramulariae** Wollenw., l. c. — Stat. conidioph. ? *Ramularia magnusiana* (Sacc.) Lind. = Septocylindrium magnusianum Sacc. parasiticum in foliis Trientalis europeae. — Peritheciis solitariis v. in acervulos aggregatis, rubris, 200-300 × 170-250, ovoideis v. globosis; ascis 8-sporis; sporidiis coacervatis, ochroleucis, singulis hyalinis, tenuibus, typice ellipsoideis, 1-septatis, 12-15 × 3,2-4, rarius 11-20 × 3-4,5, in statu germinanti 1-3-septatis. 5503

Hab. in tumoribus heteroblasticis ramentorum Rubi fruticosi (Rosaceae), pr. Vohwinkel Rhenogoviae, Germania. — Nisi status conid. distinguat speciem, haec aegre distinguenda videtur. Typus *Ramulariae* est biophilus et foliicola ergo inepte ut specificum nomen *Neonectriae* seu *Nectriae* adhibitum. Aegre synonym. esse potest *Fusarium obtusiusculum* Sacc. (ut A. affirmat) saprophyticum in hibernaculis Nelumbii (P. A. Sacc. ms.).

SEPTOMAZZANTIA Theiss. et Syd., Ann. Mycol. 13., 1915, p. 193 et

668. — Stroma cortice innatum superficie emergens. Perithecii immersi parietibus brunnescentibus fibrillosis mollibus limitati. Asci aparaphysati octospori. Sporidia hyalodidyma. — Typus gen.:

1. **Septomazzantia epitypha** (Cooke) Theiss. et Syd. (= Phyllachora epitypha (Cooke) Sacc., Syll. II p. 605). 550

2. **Septomazzantia bicchiana** (De Not.) Theiss. et Syd. (= Microcyclus bicchianus (De Not.) Syd., Syll. XVII p. 845). 550

IJUHYA Starb. — Syll. XVI p. 581.

1. **Ijuhya vitrea** Starb. — Syll. XVI p. 581 — var. **javanica** v. Höhn., Fragm. zur Mykol. 762, in Stzgsb. Akad. Wiss. Wien, CXXI, 1, p. 380 (1912). 550

SPHAEROSTILBE Tul. — Syll. II p. 511, IV p. 972, XI p. 359, XVII p. 798, XXII p. 475.

1. **Sphaerostilbe flammeola** v. Höhnel, Fragm. z. Mykol. XVII N. 877 p. 2 (50), Stzb. d. k. Ak. d. Wiss. Wien, Math.-naturw., Abt. I, 124 Bd. — Strasser, Verh. zool. bot. Ges. 69., 1919, p. 358.— Peritheciis piriformibus pallide rubris, solitariis v. aggregatis, parietibus tenuibus praeditis, basi hyphis hyalinis donatis, ostiolo pilis hyalinis simplicibus unilocularibus ornato; paraphysibus nullis v. indistinctis; ascis clavatis sessilibus, 80-100 × 14; sporidiis hyalinis bilocularibus plerumque ellipsoideis v. biconoideis, distincte constrictis, loculo superiore majore, 20-30 × 8-10. 550

Hab. in cortice exsiccata Clematidis Vitalbae (Ranunculaceae), Austria. — Status conidicus *Atractium flammeolum* v. Höhn. — Proxima *Sph. fuscae* Fuck. et *Sph. flammeae* Tul.

2. **Sphaerostilbe placenta** Theissen, Ann. Mycol. IX, 1911, p. 55, tab. V fig. 10, VI fig. 30. — Stilbum subulatum, fuligineum, griseo-viridulo-pruinatum, 1-1,5 mm. longum; stromatibus pyrenophoris applanato-placentiformibus, vix 0,5 mm. crassis, ambitu irregulariter orbicularibus, 1-3 mm. diam., gyroso-colliculosis, griseo albidis, ostiolis luteo-brunneis punctatis, aetate fuscescentibus et grosse nigro-punctatis; intus griseis, intense rubescentibus quando madefiunt; perithecis sphaeroideis, 250-280 μ diam. v. piriformibus 280-360 × 220-280, immersis, ostiolo vix cupulato-emergenti; ascis rectocylindraceis, pedicello brevi firmo, supra rotundato-truncatis, p. sp. 72-80 × 6-8; sporis monostichis, hyalinis medio septatis non constrictis, ellipsoideis, utrinque rotundatis, episporio verrucoso, 10-13 × 5-6; paraphysibus nullis. 550

Hab. in ligno corticato, Rio Grande do Sul, Brasiliae. — Differt a *Sph. Henningsii* Ferd. et Wing. stromatibus valde applanatis, sporis verrucosis, stilbo subulato nec globoso-capitato et colore.

VALSONECTRIA Spegazz. — Syll. II p. 579, XIV p. 645, XXII p. 483.

1. **Valsonectria orbiculata** Syd., Ann. Mycol. 14., 1916, p. 86. — Stro- 5509
matibus amphigenis, in circulos omnino orbiculares 3-5 mm. latos dense concentriceque dispositis, minutis, globoso-conicis, 350-450 μ diam., basi saepe confluentibus, matricem elevantibus et tandem disrumpentibus, demum vertice parum prominulis, profunde immersis, mesophyllum occupantibus, contextu carnoso ex hyphis crassiuscule tunicatis crebre articulatis inferne hyalinis superne griseo-brunneolis composito; perithecciis paucis in quoque stromate, omnino immersis, 150-220 μ diam., ostiolis-longiusculis et crassiusculis fulvo-rubris erumpentibus, pariete tenui sed distincto fibroso; ascis cylindraceo-clavatis, aparaphysatis, 50-70 × 10-13, octosporis; sporidiis oblique monostichis usque distichis, oblongis, medio septatis, non constrictis, hyalinis, grosse 4 guttatis, 16-18 × 5-6, utrinque obtusis, loculo supero saepe crassiore; pycnidiis simul praesentibus cum sporis fusoideis rectis vel leniter curvatis utrinque attenuatis continuis hyalinis, 8-10 μ longis et 2,5-3 μ latis, sporophoris subulatis, 8-10 μ longis et 2-2,5 μ crassis suffultis.

Hab. in foliis vivis Myrsinaceae, Miliquabo Rio Cuquenan, Venezuela (E. Ule).

HYPOCREA Fr. - Syll. II p. 520, IX p. 972, XI p. 361, XIV p. 641, XVI p. 583, XVII p. 800, XXII p. 477.

1. **Hypocrea brunnea** T. Petch, Hypocr. zeyl. in Ann. R. bot. Gard. 5510
Peradeniya v. 7., P. II, 1920, p. 132. — Stromatibus circularibus, irregulariter pulvinatis usque 1,2 mm. diam. et 0,6 mm. alt., pallide uniformiter rubro-brunneis, globosis non translucidis, ostiolis non apparentibus, elevationibus perithecialibus distinctis, intus albis, fragilibus; perithecciis globosis 0,2 mm. diam., parietibus hyalinis v. pallide flavescentibus; ascis 96 × 5; segmentibus sporarum globosis 3,5-5 μ diam. v. cuboideis et 4 × 3, spinulosis hyalinis, cirrhum album efformantibus.

Hab. in ligno emortuo, Hakgala Ceylon, Asia. — *Hyp. discellae* proxima sed ostiolis inconspicuis sporidiis majoribus etc. diversa.

2. **Hypocrea chlorostoma** T. Petch, Hypocr. zeyl. in Ann. R. Bot. Gard. 5511
Peradeniya v. VII, P. II, 1920, p. 133. — Stromatibus discoideis

supra convexulis, aequalibus usque 4 mm. diam. et 0,5 mm. crassis, margine rotundatis, flavo-brunneis dein sordide brunneis ostiolis obscure virentibus praeditis, intus albo-flavescentibus non translucidis, aridis rugosis obscure rubro-brunneis, ostiolis non evidentibus, v. supra viridi-nigrescentibus infra rubro-brunneis, intus viridi-nigrescentibus; peritheciis globosis 0,1-0,15 mm. diam. v. ovoideis 0,18 mm. diam. 0,1 mm. altis; parietibus perithecii vivis flavo-virentibus, in speciminibus siccis flavo-brunneis; ascis 8-16 sporis, 60-64 × 4; sporidiis vivis pallide viridibus, vetustate viridi-nigricantibus, verrucosis, plerumque globosis, 3,5-4, nonnullis ovoideis 4 × 3.

Hab. ad ligna emortua, Peradeniya Ceylon, Asia.

3. **Hypocrea extensa** T. Petch, Hypocr. zeyl. in Ann. R. Bot. Gard. Peradeniya v. 7., P. II, 1920, p. 132. — Stromatibus usque 1 cm. diam. v. irregulariter confluendo multo latioribus, planis tenuibus, 0,3 mm. circ. cr. pallide flavis, dense brunneo ostiolatis, globosis opacis aequalibus; margine definito non byssino arescendo incurvato, intus albis e flavo corticatis; peritheciis globosis usque 0,1 mm. diam. v. ampullaceis, confertis, parietibus flavis praeditis; ascis 8-16-sporis, parte sporifera 42-56 × 3-4; segmentis sporarum globosis, hyalinis, minute verrucosis, 2,5-3 diam. 551

Hab. ad ramos emortuos, Peradeniya, Ceylon, Asia.

4. **Hypocrea fulviseda** Bresadola, Ann. Mycol. 18., 1920, p. 56. — Subiculum late effusum, obscure fulvum, ozonioideum, ex hyphis septatis, non nodosis, 5-8 μ crassis, compositum; stromatibus pezizoideis, breviter stipitatis, extus intusque albis, disco applanato vel subconcavo, orbiculari, 1-2 mm. lato, inferne sensim attenuato; stipite cylindraceo, in subiculo nidulante, albo, 1 mm. circiter longo, $^1/_3$ mm. crasso; peritheciis immersis, subdistantibus, parvis, subglobosis, 150-160 μ, ostiolis conoideis vix prominulis et superficiem stromatis fulvello-punctatam efficientibus; contextu stromatis ex hyphis hyalinis, 3-4,5 μ crassis; ascis cylindraceis, 70-90 × 3-4; articulis sporidiorum truncato-quadrangularibus, 4 × 2, biguttulatis. 551

Hab. in cortice arbor. fraud., S. Leopoldo, Brasiliae (Rick).

5. **Hypocrea gigantea** T. Petch, Hypocr. zeyl. in Ann. R. Bot. Gard. Peradeniya v. VII, P. II, 1920 p. 131. — Stromatibus irregulariter globosis v. ovoideis usque 4 cm. long. 3 cm. latis et 3 cm. altis, lateraliter plicatis et infra breviter contractis, saepe aggregatis, quandoque pulvinatis et infra depresse plicatis, centro insertis, colore coriario v. rubro-coriario, glabris, opacis; ostiolo pallide brun- 551

neis, inconspicuis non prominentibus; intus albis, radiatim fibrillosis, stratu exteriore e contextu mox separabili; peritheciis in zona periphaerica distincta confertis, verticaliter ovoideis usque 0,4 mm. altis et 0,25 mm. diam., parietibus hyalinis; ascis cylindraceis 70 × 4, 8-16-sporis; segmentis sporarum globosis 3-4 μ diam. v. ovoideis et tunc 4-5 × 3-3,5, hyalinis minute verrucosulis.

Hab. in Peradeniya, Henaratgoda, Waga, in ins. Ceylon, Asia.

6. **Hypocrea japonica** Yasuda Ats., Botan. Mag. Tokyo, 34., 1920, p. 5515
179, 3 fig. — Stroma centralis stipitiformis, supra pileiformi et irregulariter expansum carnosum centro depressum margine lobulatum, sicco 2,5-5 cm. altum, supra, 4,5-6 cm. latum, 0,5-1 cm. crassum; superficie inaequali undique ob perithecionum ostiola nigro punctata, intus brunneo; stipite fareto cylindraceo 1,5-2,5 longo 1-1,5 cm. lato, levi, brunnescenti; peritheciis prope superficiem dense aggregatis et stratum simplicem efformantibus, ovoideis, 0,4-0,5 mm. long. 0,28-0,35 mm. latis; ascis cylindraceis infra angustatis apice rotundatis octosporis, 150-200 × 7-8; sporis monosticis, fusoideis, utrinque acutatis, bilocularibus hyalinis, levibus, 28-35 × 6-7; paraphysibus nullis.

Hab. ad terram pluribus locis, Japoniae. — Fungus comestibilis et vulgo *ibuki-take* vocato.

7. **Hypocrea Petchii** Trotter n. n., *Hyp. mellea* T. Petch, Hypocr. zeyl. 5516
in Ann. R. Bot. Gard. Peradeniya, v. VII, P. II, 1920, p. 133, nec Rehm. — Stromatibus subtranslucidis, pallide flavo-brunneis v. melleis et juventute brunneo ostiolatis, arescendo rubro-brunneis et ostiolis nigricantibus praeditis, pulvinatis usque 4 mm. diam., margine rotundatis, basi in parte centrali latiuscula insertis; superficie aequali, arescendo rugosa, juventute intus pallide flavis et carnosis, arescendo albo-flavescentibus et suberosis v. quandoque fragilibus; peritheciis plerumque verticaliter ovoideis usque 0,3 mm. alt. 0,1-0,15 mm. diam., quandoque globosis, 0,2 mm. diam., varia profunditate sitis, parietibus perithecialibus flavo-brunneis; ascis 65-75 × 4; segmentis sporidiorum ovoideis 5-6 × 4, v. globosis et 4-5 μ diam., spinulosis, flavis v. flavo-virentibus, massa sporidiorum exeunte flava.

Hab. Hakgala, Ceylon, Asia.

8. **Hypocrea mellea** Rehm, Ascomyc. Philipp. VI, Leaflets of Philipp. 5517
Botany, VI (1914) p. 2276. — Stromatibus sparsis, sessilibus, disciformi-orbicularibus, ad basim valde constrictis, 3-4 mm. latis, 1-1,5 altis, vix convexulis, margine tenuissimo levi cinctis, melleis, intus

albis; peritheciis monostiche innatis, globulosis, 150 μ latis, ostiolis punctiformibus vix conspicuis; ascis cylindraceis, aparaphysatis, 60-70 × 4; sporidiis monostichis, didymis, loculo superiore globoso, inferiore obtuse conoideo, mox secedentibus, hyalinis (mensura desunt).

Hab. in ramis deciduis decorticatis, Mt. Maquiling, prope Los Baños, ins. Philipp. (C. F. Baker).

9. **Hypocrea ambigua** Theissen, Ann. Mycol. IX, 1911, p. 58, tab. VI 5518
fig. 62. — Stromatibus sparse gregariis e subiculo albo tenuissimo, orbicularibus oriundis, hemisphaericis 0,5 mm. diam., annulo albo subiculi diu cinctis, fuscescentibus, ostiolis rubro-brunneis hemisphaerice prominulis; peritheciis immersis, subglobosis 132-170 μ diam.; ascis cylindraceis, supra rotundatis, brevissime pedicellatis, p. sp. 54 × 4; sporis viridulis, minutis, ellipsoideis, episporio minute verrucoso, medio vix constrictis, articulis hemisphaericis non secedentibus, 5,5 × 3,5.

Hab. in ramis corticatis, Rio Grande do Sul, Brasiliae. — Exterius *H. Rickii* simillina; differt subiculo plano stromatibus minoribus, peritheciis immersis, ostiolis vere prominulis, praecipue sporis.

10. **Hypocrea Rickii** Theissen, Ann. Mycol. IX, 1911, p. 58, tab. VII 5519
fig. 72. — Stromatibus pulvinatis, applanatis hemisphaericis, 0,5-1 mm. diam. e bysso albo pulvinato oriundis, ex albo floccosis ochroleucis, dein fuscescentibus, superficie ob perithecia sublibera mammilloso asperis, ostiolis non prominulis fusco-brunneo-punctatis; peritheciis ovoideis, 190-250 × 135-215, parietibus sat crassis (14-20) v. etiam piriformibus v. pressione mutua irregularibus; ascis elongatis cylindraceis, supra rotundatis, pedicello perbrevi, p. sp. 75-80 × 5,5; sporis hyalinis 9-10 × 4-5, cellula superiore rotundata, inferiori subrectangulari.

Hab. in ligno corticato, Rio Grande do Sul, Brasiliae.

11. **Hypocrea degenerans** Syd., Enum. Philipp. Fungi I, in Philipp. 5520
Journ. of Sci. VIII (1913) p. 274. — Stromatibus sparsis vel aggregatis primitus immersis dein erumpenti-superficialibus, discoideo-pulvinatis, rotundatis, semper convexis, matrici omnino lateque adnatis, 1-2 mm. diam., extus atro-brunneis vel atris, intus vivide flavo-virentibus, ostiolis peritheciorum non vel vix punctatis; peritheciis distichis, usque tristichis, globoso-conicis; ascis linearicylindraceis, p. sp. 60-85 × 4,5-6, octosporis; sporidiis biglobosis, hyalinis, levibus, intra ascos jam secedentibus, articulis 4-4,5 μ diam.

Hab. in cortice emortuo, Indochina, Annam, Nha-trang (C. B.

ROBINSON). — A caeteris speciebus differt stromate initio immerso et tunc habitu fere *Diatrypes*.

12. **Hypocrea gyrosa** Theissen, Ann. Mycol. IX, 1911, p. 59, tab. VI, fig. 53. — Stromatibus sessilibus, lata basi insidentibus v. infra coarctatis centraliterque affixis, 1-4 mm. diam. 0,8-1,3 mm. altis, margine rotundato-recurvatis, flavidulis, superficie giroso-plicata et mammilloso-undulata, ostiolis nigris punctiformibus, dense stipatis pictis, disco convexo, medio umbilicato; peritheciis stipatis, applanato-globosis, 155 × 190 v. ellipsoideis, 170-240 × 160-185, abrupte in collum longiusculum 85-100 μ longum coarctatis; ascis 125-155 × 5-5,5, cylindraceis; sporis 10,5 × 3-3,3, cellulis subaequalibus. 5521

Hab. in ligno decorticato, Rio Grande do Sul, Brasiliae. — *H. intermediae* affinis, differt tamen ostiolis distinctissimis nigris, disco plicato convexo, stromate sessili non turbinatum stipatis praecipue sporis.

13. **Hypocrea intermedia** Theissen, Ann. Mycol. IX, 1911, p. 61, tab. V fig. 27, VI fig. 51, VII fig. 67. — Stromatibus turbinatis, hypothallo tenuissimo, determinato, 2 mm. lato insidentibus, applanatis, $^3/_4$-1,$^1/_4$ mm. altis, 2-4 mm. latis, primitus flavis, dein ferrugineis, brunnescentibus; discus concavus, medio umbilicatus, leniter mammillosus, in sicco rugosus, luteo-stramineus, ostiolis luteo-brunneolis, delicatissimis, vix sub lente visibilibus punctatus, subtus angustatus in basin sterilem stipitiformem cylindricam v. potius doliiformem; contextus albidus, e cellulis polygonalibus, majusculis, circ. 16 μ diam. compositus; stratum pseudo-epidermale circ. 30 μ cr., e cellulis angustioribus (hyphis densius intricatis et brevius articulatis) formatum, rubescens; peritheciis immersis, botuliformibus (collo circ. 65 μ longo, ipsa perithecii cavitas elliptica, 150-190 × 110-140) haud stipatis; ascis breviter pedicellatis, anguste cylindraceis, p. sp. 59-64 × 3,5-4, pedicello fere filiformi, 10-16 μ longo; sporis viridulis, minutissime asperulis, 8 × 2,7-3,3, cellula superiori rotundata, inferiori paullo elongata. 5522

Hab. in ligno decorticato, Sao Leopoldo, Rio Grande do Sul, Brasiliae (RICK). — Differt ab *H. umbilicata* P. Henn. stromatibus multo minoribus sporisque verrucosis. *H. turbinata* Starb. simillina est, differt tamen fabrica disci sporisque obscure olivaceis et glabris.

14. **Hypocrea borneensis** H. S. Yates, F. from Brit. N. Borneo, in Philipp. Journ. of Sc. Bot. v. 13., 1918, p. 237. — Stromatibus gregariis, sessilibus, convexo-pulvinatis, 3-6 mm. diam., extus brunneis, intus pallide brunneis; peritheciis globosis, immersis, ostiolis 5523

punctiformibus, brevibus; ascis cylindraceis, aparaphysatis, 70-80 × 5-6, 8-sporis (simulate 16-sporis); sporidiis monostichis e cellulis 2 aequalibus compositis mox secedentibus, cellulis singulis globosis, hyalinis, 4-5 μ diametro.

Hab. ad truncum emortuum Heveae brasiliensis (Euphorbiaceae), Membakut in ins. Borneo bor.

15. **Hypocrea subiculata** Theissen, Ann. Mycol. IX, 1911, p. 56, tab. V fig. 22-23, VII fig. 68. — Subiculum albido-flavidum, late effusum, tenuissimum, ex hyphis hyalinis 6-8 μ cr. unilateraliter nodulosis, densiuscule intricatis compositum, in quo nidulant placentae stromaticae, pulvinato-applanatae, ambitu irregulari plus minusve orbiculari, c. 350-500 μ diam., tenues, peritheciis immersis vix vertice subemergentibus leniter mamillosae, primitus flavidulae, ostiolis peritheciorum cinnamomeis pictae, dein magis magisque totâ superficie cinnamomeae; perithecia singula 150-170 μ diam. pauca in quoque stromate (9-20), sphaeroidea; asci cylindracei breviter pedicellati, p. sp. 80-92 × 4,5-5; sporae hyalinae medio vix constrictae, 10 × 4, in articulos fere aequales secedentes. 55

Hab. in Poria sp. (Fungi), Sao Leopoldo, Rio Grande do Sul, Brasiliae (Rick).

16. **Hypocrea ibicuyensis** Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires XXIII (1912) p. 75. — Stromatibus sparsis vel hinc inde 2-3 gregariis, discoideis vel discoideo-repandulis, 2-10 mm. diam., inferne matrici latiuscule adfixis, planis, superne convexulis, atro-olivaceis, ostiolia papilliformibus vix obscurioribus laxe exasperatis, intus carnoso-ceraceis albis; loculis globosis 100 μ diam., omnino infossis; ascis cylindraceis, constipatis, 90 × 5, aparaphysatis; sporidiis recte monostichis, bicellularibus, levibus, articulis globosis, 4 μ diam. mox secedentibus. 55

Hab. ad truncos excaesos decorticatos Erythrinae crista-galli (Leguminosae), in silvulis uliginosis prope Ibicuy, Entre Rios, Argentina.

17. **Hypocrea corticioides** Speg., Mycet. Argent. VI, Anal. Mus. Nac. Buenos Aires XXIII (1912) p. 75. — Stromatibus latissime effusis, 1-10 cm. diam., tenuibus, 0,5 cr., ligno denudato vel cortice relaxato tecto insidentibus, laxissime adnatis et facillime secedentibus, repando-difformibus, extus ochroleucis vel pallide fulvis, intus compactiusculis, carnoso-ceraceis, albis; peritheciis copiosis, omnino immersis, globulosis, 130-140 μ diam., ostiolo vix papillato, leviter infuscato, minutissime tantum manifestis, membranaceis, fulvellis, 55

udis cupulato-collapsis; ascis cylindraceis, breviter pedicellatis, 55-60 × 4, aparaphysatis; sporidiis recte monostichis, hyalinis, bicellularibus, articulis globosis, 3-3,25 μ diam., mox secedentibus.

Hab. ad truncos excaesos emortuos Erythrinae cristagalli (Leguminosae), in silvulis uliginosis prope Ibicuy, Entre Rios, Argentina.

DIALHYPOCREA Spegaz., Rel. mycol. trop etc., in Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 113. — Perithecia superficialia caespitosa, stromate parcissimo basi juncta ut in Eunectriis plurimis; asci lineares aparaphysati octospori; sporae hyalinae didymae, articulis subglobosis mox secedentibus.— Stroma et perithecia *Eunectriae* sporidia vero *Hypocreae.*

1. **Dialhypocrea puiggariana** Spegaz., l. c. cum icon. — Stromatibus nu- 5527
merosis discretis pusillis (250-500 μ) sessilibus glaberrimis flavidulomelleis, 1-6-peritheciferis; peritheciis globosis fere liberis vix basi stromati insititiis et inter se breviter confluentibus, non v. vix papillulato-ostiolatis, carnosulis, levibus opacis, 120-150 μ cr.; ascis angustis apice rotundatis, basi breviter attenuato-pedicellatis, octosporis, 80 × 5-6; sporidiis rectis monostichis parvis 7-8 μ long., levibus, loculis aequaliter cuboideo-subglobosis, 4-5 × 3-4 crassis.

Hab. ad ramos denudatos putres, in silvis Apiahy, Brasilia (J. Puiggari).

CLINTONIELLA Sacc. — Syll. II p. 532, XIV p. 645, XVI p. 588, XXII p. 480.

1. **Clintoniella incarnata** (Pat. et Har.) Sacc. et Trott. — Syll. XXII p. 5528
480 — Notae Mycol. XXII p. 190 (R. Acc. Pad. 1917).

Hab. (adde) in fragmentis corticalibus dejectis indet. Filfil, Erythraea, Africa trop. — Pulchella, exigua species. Asci cylindracei, 60-65 × 5,5-6, octospori; sporidia oblique monosticha, 8 × 4,7, hyalina, immatura diblasta, probabiliter matura 1-septata; ostiola punctiformia, videntur atro-sanguinea.

PODOCREA Sacc. — Syll. II p. 530, XIV p. 645, XVI p. 587, XVII p. 799, XXII p. 480.

1. **Podocrea zeylanica** Petch, Ann. R. Bot. Gard. Peradeniya v. VI, 5529
P. III, 1917, p. 230. — Stromatibus fasciculatis, simplicibus, clavatis vel cylindraceis, interdum compressis, supra saepe lobatis, ad 3 cm. alt., 4 mm. diam., rufis vel pallide brunneis, ostiolis sa-

turatioribus, basi pallescentibus, glabris; peritheciis confertis, ad 0,25 mm. diam.; ascis 60-80 × 3-4, cylindraceis, octo-dein sexdecim-sporis; sporis viridi-hyalinis, globosis, 3-4 diam., vel ovoideis, 3-5 × 2-5, leniter verrucosis.

Hab. ad ramos dejectos, Peradeniya, Ceylon, Asia.

HYPOCREOPSIS Karst. — Syll. IX p. 980, XVI p. 590.

1. **Hypocreopsis Phyllostachydis** (Syd.) Miyake et Hara, Stud. üb. Pilze 5530
d. Bamb. in Jap., in litt. VI, 1912. — *Ustilaginoidea Phyllostachydis* Syd. — Syll. XVI p. 382. — Peritheciis stromate immersis, subglobosis, 170-200 × 150-170, subhyalinis; ostiolis papillatis emergentibus; ascis 8-sporis cylindraceis v. clavatis, 60-80 × 4-5; sporidiis ellipsoideis v. fusoideis, 1-septatis, non v. vix constrictis, 6-9 × 3-4, hyalinis, loculis non v. 1-guttulatis.

Hab. in culmis Phyllostachydis (Graminaceae), Komba Tohyo (Shirai, Miyake). — Specimina a cl. Sydow observata vetusta, obsoleta, hinc error de genere. Stroma verruciforme 5-9 mm. long., 4-5 mm. diam., subroseum ostiolis punctatum.

HYPOMYCES Fr. — Syll. II p. 466, IX p. 954, XI p. 356, XIV p. 641, XVI p. 582, XVII p. 803, XXII p. 480.

1. **Hypomyces pallidus** T. Petch, Hypocr. zeyl. in Ann. R. Bot. Gard. 553
Peradeniya v. VII, P. II, 1920, p. 134. — Mycelio albo compacto effuso; conidiophoris verticillatis usque 150 µ long. infra 4 µ cr., septatis; conidiis non visis; peritheciis immersis ostiolis prominentibus praeditis, quandoque superficialibus, hyalinis globosis v. ovoideis, usque 0,4 mm. altis, 0,2 mm. diam., ostiolo papilliformi praeditis; ascis cylindraceis octosporis, 100-110 × 6; sporidiis plus minus oblique monostichis, anguste ovoideis, inaequilateris, v. fusoideis, hyalinis, cohacervatis albis, uniseptatis, non v. leniter constrictis, minute spinulosis, utrinque obtusis, 9-13 × 3-4.

Hab. in pileo Agaricacearum (Fungi), Deviturai, Ceylon, Asia.

2. **Hypomyces sulphureus** H. et P. Sydow, Ann. Mycol. XII, 1914, 55
p. 564. — Stromate tenui membranaceo, continuo, intense sulphureo, effuso, ex hyphis laxis hyalinis 3-4 µ crassis formato; peritheciis immersis, dense sparsis, ovato-globulosis, vel succineo-flavis vel succineis, 250-300 µ diam., ostiolo obtuse conico; ascis cylindraceis, 75-95 × 6, octosporis, aparaphysatis; sporidiis monostichis vel oblique monostichis, fusoideis, utrinque leniter atte-

nuatis et apiculo minutissimo saepe vix visibili auctis, medio constrictis, primitus non dein modice septatis, hyalinis, distincte verrucosis, 15-70 × 4-5.

Hab. parasiticus ad H i r n e o l a m a f f i n e m (Fungi), Mt. Maquiling prov. Laguna, Luzon, Ins. Philippin. (P. W. Graff).

3. **Hypomyces flavo-lanatus** Petch, Ann. R. Bot. Gard. Peradeniya v. VI P. III, 1917, p. 229.— Subiculo albo, tenui; peritheciis confertis, aurantiacis, globosis, 150-200 μ diam., hyphis flavis radiantibus vestitis, ostiolo papillato fusco-rubro; ascis octosporis, ad 70 × 4; sporis monostichis viridi-hyalinis, ovoideis, interdum attenuatis, uniseptatis, leniter constrictis, obtusis, minutissime verrucosis, 6-8 × 2,5-3; statu conidiophoro stilboideo, ad 1,2 mm. alt.; stipite aurantiaco, basi 40 μ diam., sursum attenuato, laxo; capitulo globoso, ad 100 μ diam.; conidiophoris penicillioideis; conidiis subglobosis hyalinis, 2,5 μ diam. 5533

Hab. in P o r i a sp. (Fungi), Peradeniya, Ceylon, Asia.

4. **Hypomyces Rubi** (Osterw.) Wollenw. in Phytopathology III p. 211 et 224 (1913), tab. XXII fig. 14-16, *Nectria Rubi* Osterwalder, Ber. deutsch. bot. Ges. XXIX Bd., 1911, p. 620, tab. XXII. — Peritheciis primum flavo-virentibus, dein rubris, limoniformibus ostiolo papillato praeditis, 500 μ alt., 430-460 μ cr.; ascis cylindraceo-clavatis 106-119 μ long., aparaphysatis v. vix paraphysatis; sporis bilocularibus, utrinque rotundatis in quoque loculo 2-3-guttulatis, monosticis v. supra disticis, 15,9-18,6 × 4,6-5,2. Statu conidico (*Fusarium*, an potius *Ramularia* ?): conidiis cylindraceo-curvulis utrinque ellipsoideo rotundatis, continuis v. 3-5 septatis et tunc 53,2-61,2 × 6,6-7-9; conidiophoris dichotome v. trichotome ramosis; sporodochiis violaceis. 5534

Hab. in radicibus languentibus R u b i i d a e i « Baumforths Sämling » culti, Wädenswil, Helvetia.

5. **Hypomyces Ipomoeae** (Halst.) Wollenw. in Phytopathology III p. 34 (1913) Fig. D. — Ita vocanda est *Nectria Ipomoeae* Halsted, Syll. XI p. 357. — Peritheciis ovoideis rugosis rubris 225-375 × 175-300; sporidiis uniseptatis 10-13 × 4,5-6. Status conidicus fusarioideus (sect. Martiellae), conidiis apice magis acutatis basi magis pedicellatis, tunc 5-septatis, 45-70 × 4,25-5,5, tunc 3-5 septatis, 30-70 × 3,75-5,5; hyphis unicellularibus 6-12 × 3-4,75. Chlamydosporis 7-10 μ (ex Wollenweber). 5535

APIOCREA Sydow, Ann. Mycol. 18., 1920, p. 186. — Caracteres *Hypo-* 5536

mycetis, sed sporae valde inaequaliter septatae. — Typus generis *Apiocrea chrysosperma* (Tul.) Syd. = Hypomyces.

NECTRIOPSIS R. Maire, Ann. Mycol. IX, 1911, p. 323. — Cnfr. *Hypho-* 553
nectria p. 662.— Perithecia in subiculo byssino insidentia; asci aparaphysati, ascosporae utrinque rotundatae v. subacutatae nec apiculatae, uniseptatae, monostichae. — Est *Byssonectria* Karst. sporis bilocularibus; inter *Hypomyces* et *Nectria* medium, a primo differt sporis rotundatis v. subacutis nec apiculatis, ab altero stromate byssoideo et habitat.

Huc spectant *Byssonectria violacea* (Fr.) Seav., *Hypomyces aureonitens* Tul., *Hyp. candicans* Plowr., *Hyp. berkeleyanus* Plowr.

LISEA Sacc. — Syll. II p. 517, XI p. 360, XIV p. 640, XVI p. 581, XVII p. 806.

1. **Lisea revocans** Sacc., Notae Mycol. XX, Nuovo Giorn. bot. it. N. 55
S, 23., 1916. p. 205. — Peritheciis hinc inde dense et saepius longitudinaliter congregatis, globoso-conoideis, rugulosis, 200 μ alt., 170 μ cr., contextu dense et minute celluloso atro-olivaceo v. atrorufescente, cellulis 10-12 μ diam., ostiolo rotundo 20 μ diam., periphysibus angustissimis subhyalinis praedito; ascis octosporis fusiformibus, utrinque acutulis, 55-60 × 11-12; paraphysibus deliquescentibus; sporidiis distichis fusoideis, interdum curvulis, 18-23 × 4,5-5, e hyalino dilutissime olivaceis.

Hab. in foliis emortuis Imperatae cylindricae (Graminaceae), Los Baños, Ins. Philipp.— Est e typico grege *Gibberellae,* sed didymospora.

2. **Lisea ? pulicaris** Speg., Anal. Mus. Nac. Buenos Aires XXVI p. 127 55
(1914). — Peritheciis superficialibus, sparsis vel gregariis, subseriatis, minutis, globosis, 150-180 μ diam., glabris, non collabescentibus, ostiolo minuto impresso pertusis, contextu grosse parenchymatico-celluloso, amoene caeruleo; ascis subclavulatis, basi modice attenuato-pedicellatis, 80-100 × 12-14, aparaphysatis sed muco subfilamentoso obvallatis; sporidiis oblique distichis, ellipsoideis, utrinque acutiuscule rotundatis, medio septato-constrictis, 15-20 × 7-9, loculis aequalibus saepius grosse 1-guttulatis.

Hab. in culmis dejectis putrescentibus Penicillariae typhoidis (Graminaceae), in sepibus prope Daccar, Senegal — An *Gibberellae pulicaris* (Fr.) Sacc. forma didymospora?

3. **Lisea Spatholobi** Rehm, Ascomyc. Philipp. III, in Philipp. Journ. of 55

Sci. VIII (1913) p. 395. — Peritheciis in maculis hypophyllis plus minusve circularibus, 1-2,5 cm. latis, dilute flavescentibus gregarie sessilibus, globoso-conoideis, haud papillulatis, poro pertusis, fuscis, 150 μ diam., excipulo crasso, parenchymatice contexto, cellulis faciliter dissolutis, extus obscure fusco, interius coerulescente, versus basim verrucoso cellulis conoideo-prominentibus; ascis fusiformibus, octosporis, aparaphysatis, 30 × 8-10; sporidiis distichis, oblongis, utrinque obtusis, rectis vel subcurvatis, continuis, biguttatis, dein medio septatis, non constrictis, utrinque biguttatis, hyalinis, 10-12 × 3-4.

Hab. in foliis Spathol obi gyrocarpi (Leguminosae), Luzon, Prov. Laguna, Mt. Maquiling, Ins. Philipp. (E. B. Copeland). — Subiculum nullum praesens.

4. **Lisea Tonduzi** Spegaz., Fungi Costaric. nonn. in Bol. Ac. Nac. Cienc. 5541
Cordoba, t. 23., 1919, Extr. p. 202, cum icon. — Perithecia superficialia, solitaria v. paucigregaria (2-3), 150-180 μ diam., uda globulosa, sicca corrugato-collabescentia, atro-coerula, glaberrima, contextu grosse parenchymatico amoene intenseque caeruleo; asci subcylindracei, mox diffluentes, 8-spori, aparaphysati ?, 75-80 × 15-16; sporae distichae elliptico-subobovatae, medio 1-septatae non constrictae, laeves hyalinae, 18-20 × 8.

Hab. communis in fructibus immaturis dejectis Coffeae sp. (Rubiaceae), in agris prope Tuis, Costarica, America trop.

Sect. 5. Phaeodidymae

LETENDRAEA Sacc. — Syll. II p. 538, XIV p. 646, XXII p. 484.

1. **Letendraea rickiana** Rehm, Ascom. Exsicc. fasc. 55 n. 2114, Ann. 5542
Mycol. XII, 1914, p. 173. — Peritheciis dispersis, sessilibus conoideis, minutissime papillatis, glabris, fusco-luteis, parenchymatice ex cellulis perparvulis contextis, 150 μ latis; ascis cylindraceo-clavatis, apice rotundatis, stipitatis, 70-75 × 8-10, octosporis; sporis oblongo-ellipsoideis, medio, rarissime, infra medium septatis ibique paullulum constrictis, utraque cellula primitus 1-guttata, hyalinis, dein fuscis, 8-10 × 4-5, monostichis, paraphysibus filiformibus tenerrimis.

Hab. truncos putridos Fagi (Fagaceae), Sonntagberg, Austria inf. (Strasser). — *L. eurotioides* Sacc. et *L. luteolae* E. et Ev. proxima sed fabbrica peritheciorum distincta.

Sect. 6. Hyalophragmiae

ORCADIA Sutherland, Trans. Brit. Myc. Soc. V, pt. I, 1914, p. 151 (1915). — Stroma nullum. Perithecia simplicia, immersa, contextu distincte molli pallidoque, numquam carbonaceo, ostiolo elongato fastigato praedita. Asci cylindracei vel clavati, octospori, paraphysati. Sporidia hyalina, transverse 2 pluri-septata. — Genus *Cesaticilae* forte affine, sed ostiolo elongato recedit.

1. **Orcadia Ascophylli** Sutherl., loc. cit., tab. 3 fig. III. — Mycelio hyalino; peritheciis thallo omnino immersis, globosis vel arcuatis, mollibus, pallidis, 160-200 μ diam., ostiolo elongato, lato, cylindraceo, 80-125 × 35 superficiem attingente sed non protrudente; ascis clavatis, octosporis, 65-75 × 17,5-18; periphysibus numerosis; paraphysibus paucis, filiformibus, simplicibus, sporidiis cylindraceis, parum curvatis, 3-septatis, flavescentibus.

   Hab. in thallo vivo Ascophylli nodosi (Algae), Orkney, Scotia.

2. **Orcadia pelvetiana** Sutherl., New Phytologist, v. XIV, 1915, p. 183, fig. 1. — Mycelium in quibusdam locis, hyalinum; stroma nullum; perithecia simplicia, 110-140 μ diam., globosa, mollia, pallida, thallo omnino immersa, ostiolo longissimo, 160-180 μ longo, 20-30 μ lato, cylindraceo vel fastigato, ad superficiem pertinente; ascis clavatis vel fusiformibus curvatisve, 50-65 × 11-13, octosporis; paraphyses deliquescentes; sporidia fusiformia, curvata, circa 40 × 4-5,3-septata, primo hyalina demum flavescentia.

   Hab. in thallo vivo Pelvetiae canaliculatae (Algae), Orkney and Clare Island, Britannia.

BIONECTRIA Spegaz., Fungi Costaric. nonn., in Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 201. — Biophila; stromata subcarnosula pallidula matrici innata parum manifesta; perithecia carnosula laeticoloria, plus minusve superficialia, constipata sed discreta basi stromate communi confluentia; asci octospori; sporae hyalodidymae. — Est *Nectria* in partibus viventibus plantarum vigens.

1. **Bionectria Tonduzi** Spegaz., l. c. cum icon. — Perithecia dense gregaria, stromate parco matrici innato-insidentia, primo suberumpentia, serius omnino superficialia 100-150 μ diam. carnoso-ceracea glabra sed squarroso-rimulosa, carneo-ochroleuca, ostiolo umbona-

tulo fuscescente coronata, in sicco corrugata v. subcupulato-collabescentia, contextu indistincto; asci fusoidei utrinque sensim attenuati, apice rotundati, postice cuneati ac pedicello brevi crassoque suffulti, aparaphysati v. parcissime mucose pseudoparaphysati 70-80 × 15; sporae distichae ellipticae non v. lenissime subclavulatae, medio 1-septatae non constrictae, rectae, laeves, hyalinae, 25 × 10.

Hab. in ramis et foliis vivis Buetneriae carthagenensis (Sterculiaceae), prope S. Josè, Costarica, America trop.

CALONECTRIA De Not. — Syll. II p. 540, IX p. 982, XI p. 363, XIV p. 647, XVI p. 593 et 1141, XVII p. 809, XXII p. 487.

1. **Calonectria Gymnosporangii** Jaap, Ann. Mycol. 15., 1917, p. 10. — Peri- 5516
theciis in Gymnosporangio parasiticis, in acervulos verruciformes 1,5-3 mm. latos collectis, atro-rubris, glabris, globosis, 250-350 μ lat. ostiolo papilliformi, aetate collabescentibus; ascis tereti-clavatis, apice rotundatis, 150 × 8-10, octosporis; sporidiis oblongo-fusoideis, rotundatis, 4-cellularibus, rarius 2-cellularibus, 15-30 × 7-10, saepe guttulatis, hyalinis; paraphysibus non visis.

Hab. supra Gymnosporangium confusum (Fungi) ad ramos Juniperi phoeniceae et J. Oxycedri (Coniferae) in consortio *Fusarii Gimnosporangii* quod est verisimiliter status conidiophorus, in peninsula Lapad pr. Ragusam, Dalmatia.

2. **Calonectria limpida** Syd., Leaflets of Philipp. Bot. V (1912) p. 1545. — 5517
Peritheciis dense gregariis, in mycelio *Meliolae* parasitantibus, conicis, 70-110 μ altis, 50-80 μ latis, flavo-melleis, vel virescenti-flavis, in mycelio tenuissimo albido ex hyphis dense intertextis, hyalinis, ramosis, remote septatis, 2-3 μ cr. composito, superficialibus, circa apicem pilis brevissimis hyalinis vel subhyalinis, obtusis, 3,5-5 μ crassis obtectis, ostiolo prominulo, contextu e cellulis minutis imbricatim superpositis composito, hinc inde superficie lenissime asperulis; ascis fasciculatis, fusoideo-clavatis vel clavatis, apice saepe attenuatis, sessilibus vel brevissime stipitatis, 32-42 × 6-10, octosporis; sporidiis fusoideis, utrinque obtusis, primo medio 1-septatis, dein 3-septatis, haud constrictis, hyalinis, 14-17 × 2-3.

Hab. parasitica in mycelio vetusto Meliolae (Fungi) ad folia Acalyphae stipulaceae (Euphorbiaceae), Brooks Point, Palawan, ins. Philipp. — Habitus *Ophionectriae* sed sporidiis *Calonectriae.*

3. **Calonectria coralloides** A. Maublanc, Bol. Agric. Sao Paulo 1915, p. 5548
315-316 et tab. VI fig. 5-8; Bull. Soc. Mycol. de Fr., XXXVI, 1920,

p. 37, tab. III fig. 5-8.— Peritheciis minutis (100-150 μ diam.), sparsis, globosis, poro apicale vix conspicuo, albidis, in mycelio tenue, arachnoideo, ramoso, hyalino sessilibus, pilis numerosis praecipue ad apicem ornatis; pilis hyalinis, rigidis, brevibus, 20-30 μ altis, 5-8 crassis, apice irregulariter dichotome ramosis, crasse tunicatis; ascis cylindricis v. fusoideis, brevissime pedicellatis, tunica crassa praeditis, apice rotundatis, 50-75 × 14-16, 8-sporis, paraphysibus filiformibus; sporidiis distichis, clavatis, demum tenuiter 3-septatis, guttulatis granulosisve, non vel vix medio constrictulis, hyalinis, 15-20 × 5-8, apice primum rotundatis, demum (an germinantibus?) attenuatis et fere appendiculatis, ad basim attenuatis, demum appendiculo obtuso recurvoque ornatis.

Hab. in foliis Clidemiae hirtae G. Don (Melastomataceae), supra mycelium *Meliolae Melastomacearum* Speg. (Fungi), socio *Trichothyrio fimbriato*, Rio de Janeiro, Brasiliae.

4. **Calonectria graminicola** F. L. Stevens, Bot. Gazette, 65., 1918, p. 5549
232.— Mycelium congregatum submembranaceum. Peritheciis e parcis numerosis, rubridis arescendo pallidis, globosis, 200-225 μ diam., cellulis irregularibus 10-18 μ diam.; setulis perithecialibus subcopiosis non septatis e apice obtuse regulariter subconoideis, basi non bulbosis, 75 μ long. basi 15 μ cr.; ascis numerosis 8-sporis cylindraceis 75 × 7-8; paraphysibus copiosis filiformibus; sporidiis maturis 3-septatis, e hyalinis pallide stramineis, rectis, curvis v. sigmoideis, utrinque acutis, 30-36 × 5.

Hab. parasitica in Meliola Panici (Fungi), in Lasiacis compacta et L. divaricata (Graminaceae) et Mel. Andirae in Andira jamaicensis (Leguminosae), in Porto Rico.

5. **Calonectria epimyces** (Syd.) P. A. Sacc.— *Hyalocrea* (n. gen.) *epimyces* 5550
Syd., Ann. Myc. 15., 1917, p. 214. — Perithecia pluria aggregata, mycelio mucedineo byssino hyalino ex hyphis repentibus tenuibus 2-2,5 μ crassis vix vel remote septatis ramulosis superficialiter insidentia, globulosa, 150-185 μ diam., albido-carnea, poro minutissimo vix perspicuo, pariete ca. 10 μ crasso minute parenchymatice e cellulis 4-6 μ diam. contextu pilis longiusculis (usque 180 μ) hyalinis continuis obtusis 2,5-3 μ crassis flexuosis saepe coalitis obsessa; asci ovato-oblongi vel oblongi, octospori, sessiles, 90-120 × 40-52, ad apicem incrassati; sporae conglobatae, oblongo-clavulatae, utrinque rotundatae, 3-septatae, non constrictae, cellulis duabus extimis semper multo minoribus, hyalinae, 33-40 × 12-13.

Hab. in superficie stromatis Phyllachorae (Catacaumatis),

Elmeri (Fungi) ad folia Fici Minahassae (Moraceae), Mt. Maquiling, Ins. Philipp. (C. F. Baker).

6. **Calonectria Bambusae** (Hara) v. Höhn., Ann. Mycol. 17., 1919, p. 119. — *Miyakeamyces* (n. gen.) *Bambusae* Hara, Sydow, Fungi exot. exsicc. n. 385. 5551

Hab. parasitica in Phyllachora Phyllostachydis Hara (Fungi), in foliis Phyllostachydis bambusoidis (Graminaceae), Japonia.

7. **Calonectria pellucida** O. Rostrup, Dansk Botan. Arkiv, 2., 1916, n. 5, p. 8, fig. 7. — Peritheciis superficialibus, perfecte sphaericis, pellucido-albis v. hyalinis, 140-150 μ diam., pariete 15 μ crasso; ascis cylindraceis, breviter pedicellatis, saepe curvatis, 160-165 × 5; sporis monostichis, fusoideis, utrinque acutissimis, 3-5 septatis, qua vix in conspectum cadunt, instructis, guttulatis, 18-21 × 3,7-4,3. 5552

Hab. ad palcas Dactylidis glomeratae (Graminaceae), S. Gelsskov, Dania.

8. **Calonectria perpusilla** Sacc., Notae Mycol. XXIII p. 69 (Accad. Veneto-trent. 1917). — Peritheciis glumicolis, sparsis, perexiguis, superficialibus, subglobosis, dilute aurantiacis, 80-85 μ diam., udis 90-100 μ diam., vertice obtusis, senio saepe collabentibus; contextu celluloso tenui, dilute roseolo; ascis teretiusculis, brevissime stipitatis, primitus apice abrupte-tenuatis, 8-sporis, minutissime 2-foveolatis, 35-40 × 7; paraphysibus bacillaribus spuriis: sporidiis oblique monostichis fusoideis, diu continuis, demum 3-septatis, non constrictis, minute 2-4-guttulatis, rectis, hyalinis, 10-12 × 2,4. 5553

Hab. in glumis emortuis Oryzae sativae (Graminaceae), Los Baños, Ins. Philipp. — Socium adest *Myrothecium Oryzae*, quod cfr. suo loco.

9. **Calonectria nivalis** Schaffnit, Mycol. Centrlbl. II (1913) p. 246, fig. 1-2. — *Nectria graminicola* Bk. et Br., saltem p. p. — Peritheciis gregariis, subsuperficialibus, saepe caespitosis, globoso-conoideis, 100-300 × 150-200, rubro-lateritiis vel rubro-salmoneis, excipulo tenui, subhyalino; ascis copiosis, oblongis vel clavulatis, 50-60 × 8-10, paraphysibus paucis aequilongis intermixtis; sporidiis irregulariter distichis, fusoideis, saepe inaequilateris vel curvulis, utrinque rotundatis, dilute roseis, medio septatis (raro 2-septatis), 12,5-16 × 2,5-3,5. — Status conidicus *Fusarium nivale* (Fr. p. p.) Ces. conidiis 14,5-2,5 × 3-4, 1-6 (typice 3-) septatis. — Sclerotia brunneo-atra, globosa, 150-300 μ diam. — Chlamydosporae ovoideae, 11,5 × 7,5, vel globosae, 6,5 μ diam., uni-raro bi-cellulares. 5554

Hab. ad basim culmorum Secales aliorumque graminum (Graminaceae), nec non in Trifolio (Leguminosae), ex herbario Musaei berolinensi.

10. **Calonectria höhneliana** Jaap, Ann. Mycol. 14., 1916, p. 10. — Peritheciis sparsis, sessilibus, plus v. minus globulosis, 150-300 μ diam., contextu flavo rubello, serius brunneolo; ascis anguste clavatis, plerumque medio crassioribus, apice obtuse tenuatis, stipitatis, 60-85 × 6-8, octosporis; sporidiis anguste tereti-fusoideis, 17-24 × 2-2,5, rectis, rarissime leviter curvis, 4-cellularibus, hyalinis, distichis; paraphysibus copiosis, filiformibus, 1 μ cr. 5555

Hab. in cladodiis adhuc vivis Rusci aculeati (Liliaceae), pr. Castelnuovo, Dalmatiae.— Perithecia senio cyanescentia ad *Gibberellam* nutant: ex subiculo flavo-griseolo matricem obducente videntur oriri.

11. **Calonectria hibiscicola** P. Henn., Hedw. vol. 48. (1908) p. 105. — Peritheciis in caespitulis pulvinatis, rotundatis, isabellinis, 1-2 mm. diam., erumpentibus, subglobosis, verruculosis, papillatis, hyalino-flavidulis, 180-200 μ diam.; ascis clavatis, obtusis, paraphysatis, 4-sporis, 60-70 × 9-11; sporidiis oblique monostichis, ellipsoideis, saepe curvulis, obtusis, 3-septatis, hyalinis, 18-24 × 5-7. 5556

Hab. in cortice Hibisci schizopetali (Malvaceae), hort. botan. Goeldi, Parà, Brasilia (Baker).

12. **Calonectria ambigua** Spegaz. — Syll. II p. 544 var. **exappendiculata** Spegaz., Rel. mycol. trop. etc., in l. c. Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 113. — Peritheciis subglobosis 250 μ diam. puberulis ostiolo umbilicato praeditis; ascis cylindraceis subclavatis, crasse tunicatis, 120-140 × 12-16, paraphysatis, octosporis; sporis oblique distichis subfusoideis utrinque acutatis, triseptatis, non constrictis, 36-40 × 6-7, levibus hyalinis. 5557

Hab. in foliis coriaceis vivis Sapindaceae?, prope Apiahy, Brasilia (J. Puiggari).

13. **Calonectria erythrina** P. et H. Syd, Ann. Mycol. X, 1912, p. 81.— Peritheciis superficialibus, solitariis v. in greges minutos caespitosis, subiculo nullo, globosis v. ovoideo-globosis, 200-300 μ diam., usque 350 μ alt., aurantio-coccineis, in senectute ad fuscum vergentibus, levibus v. minutissime tantum granulosis, ostiolo minuto pertusis, in sicco profunde collabescentibus; ascis cylindraceis v. cylindraceo-fusiformibus 50-75 × 7-10, octosporis; sporidiis irregulariter distichis, oblongis v. subfusiformibus, rectis v. leniter inaequilateris, distincte 3-septatis, non constrictis, quaque cellula 1-gut- 5558

tulata, apicibus obtusis, hyalinis, 14-18 × 3,5-4,5.

Hab. in corticibus et ad lignum putridum. Hayoep. Borneo sudor. (H. WINKLER).

14. **Calonectria oodes** T. Pesch. Hypocr. zeyl. in Ann. R. Bot. Gard. Peradeniya v. VII, P. II, 1920, p. 135. — Peritheciis sparsis, superficialibus globosis, 0.25 mm. diam., arescendo collabescentibus, subtransluciciis e flavo-citrinis flavo-aurantiacis, quandoque globosis, plerumque pilis albis rigidis 20-50 × 5, acutatis incrustatis obsitis; ostiolo minuto parum conspicuo, poro 10 μ lato, periphysibus praedito; parietibus indistincte parenchymaticis, tritis guttulis oleosis ostendentibus; ascis clavatis apice subacutis, octosporis, 70 × 12; paraphysibus nullis; sporidiis oblique monostichis, hyalinis fusoideis v. anguste ovoideis, inaequilateris, 5-7 septatis, 18-29 × 5-6. 5559

Hab. ad ramos dejectos, Peradeniya, Ceylon, Asia. — Peritheciis primum astomis et aggregatis ut ovos insectorum ludentibus.

BRESADOLELLA v. Höhn. — Syll. XVIII p. 797.

1. **Bresadolella nigra** T. Petch, Hypocr. zeyl. in Ann. R. Bot. Gard. Peradeniya v. VII, P. II, 1920, p. 130. — Peritheciis nigris sparsis, in stromate compacto late effuso albo v. brunnescenti 0,15 mm. cr. insidentibus, globosis 66-100 μ diam. v. depresso-globosis et 100 μ diam. 70 μ altis; parietibus parenchymaticis, fuscis, setis conicis 34 μ long, basi 7 μ cr. apice acutis, sparsis, nigro-brunneis gerentibus; ostiolo obtuso v. leniter papillato; ascis cylindraceis 30-34 × 3, dein clavatis et 6 μ latis, 8-16-sporis; sporidiis ovoideis 1-septatis septo constrictis, utrinque obtusis 5 × 2,5, articulis in asco separabilibus 2-3 μ diam., plerumque distichis. 5560

Hab. verisimiliter parasitica ad perithecia Hypocreae (Fungi) cujusdam, Hakgala Ceylon, Asia.

BOYDIA A. Lorr. Smith. Trans. Brit. Mycol. Soc. t. VI, P. II, 1918, p. 151. — Perithecia nigro-brunnea, submersa, globoso-lenticularia, ostiolo breviter papillato pertusa. Asci elongato-clavati, octospori aparaphysati; sporidia elongata, curvula utrinque clavata, medio sensim attenuata, 1-septata, hyalina.

1. **Boydia remuliformis** A. Lorr. Smith, l.c., p. 151, fig. 1. — Peritheciis solitariis, numerosis, cortice subvelatis, nigro-brunneis; contextu tenuiter membranaceo, ca. 400 μ diam.; ascis oblongis, ca. 155 μ long., 25 μ lat., apice rotundatis, basi leniter attenuatis, sporis elongatis ca. 100 μ long. in medio 3-4 μ, apicem versus 7-8 μ lat. 5561

Hab. in caulibus emortuis Ilicis angustifoliae (Aquifoliaceae), West Kilbride, Ayrshire, Anglia (D. A. Boyd).

PARANECTRIA Sacc.– Syll. II p. 552, IX p. 987, XVII p. 812, XXII p. 491.

1. **Paranectria luxurians** Rehm, Ascom. Philippin. VII, in Leaflt. of Philippin. Bot. VIII, 1916, p. 2924. — Perithecia in mycelio *Meliolae Maesae* parasitica, dispersa, sessilia, ovata vel elongato-ovalia, dilute flavescentia, primitus glabra, postremo pilis dispersis, subcurvatis, obtusis, septatis, hyalinis, -50 × 4 obsessa, 120-130 μ alta, 80-100 μ lata, poro minutissimo aperta, tenerrime pseudoparenchymatice contexta, ad basim hyphis hyalinis, 4 μ latis, *Meliolae* affixa eamque saepe plane obtegentia; ascis clavatis, -50 × 10, 8-sporis, J —. Sporis bacillaribus vel acicularibus, rectis, 5-7-septatis, hyalinis, 30-40 × 2, parallelis. Paraphysibus nullis. 5562

   Hab. ad Meliolam Maesae (Fungi), Los Baños, Ins. Philipp. (C. F. Baker, Eladio Sablan) ad Meliolam Panicum (C. F. Baker).

2. **Paranectria meliolicola** F. L. Stevens, Botan. Gazette, 65., 1918, p. 232, fig. 3. — Mycelium hyalinum ex hyphys 5 μ cr. efformatum, peritheciis copiosis, 75-120 μ diam. e rubris pallidis parce setulosis, 15-30-50 μ long.; ascis e clavatis ovatis, obtusis, 8-sporis tenuiter tunicatis, 45-55 × 25-40; sporidiis hyalinis e oblongis oblongo-ellipsoideis, v. uno apice rectis altero curvatulis, 3-septatis, corpo 22, 30 × 7-10, apicibus 8 × 2. 5563

   Hab. parasitica in Meliola tortuosa (Fungi) in Pipere umbellato (Piperaceae), et in M. glabroide in P. aduncо, Porto Rico.

3. **Paranectria Miconiae** F. L. Stevens, Botan. Gazette 65., 1918, p. 233, fig. 4.— Peritheciis globulosis, e griseis albis, 100-150 μ diam. basi pilosulis; pilis non septatis crasse tunicatis obtusis, longitudine dimidium perithecii aequantibus; ascis numerosis, e clavatis ovatis, obtusis tenuiter tunicatis, 60 × 12-15; sporidiis fusoideis medio fortiter inflatis apicem versus regulariter conoideis, 3-septatis, magnitudine, apicibus inclusis, 32 × 7-8, in massa v. in asco leniter griseis; paraphysibus filiformibus brevibus. 5564

   Hab. parasitica in fungo Microthyriaceo in foliis Miconiae (Melastomataceae), Yabucoa, Porto Rico.

STEREOCREA Syd., Ann. Mycol. 15., 1917, p. 216.— Stromata erum-

penti-superficialia, composita, singula globosa vel subglobosa, saepe stipitiformiter contracta, plurima in stromate communi botryose insidentia, in sicco perdura, tota superficie fertilia. Perithecia omnino immersa. Asci octospori, aparaphysati. Sporae elongato-clavatae, transverse multiseptatae, flavidae.

1. **Stereocrea Schizostachyi** Syd., l. c. — Stromata singula globosa vel applanato-globosa 1-3,5 mm., plerumque 2,5-3,5 mm. diam., saepe ad basim plus minus longe stipitiformiter contracta, in stromate communi irregulari erumpenti-superficiali dense botryoseque insidentia et tuberculos magnos 1,5-4 cm. diam. formantia, perdura, intus extusque atro-olivacea; perithecia per totam stromatis superficiem dense aequaliterque distributa, omnino immersa, 200-280 μ longa, 130-160 μ lata, pluristicha, pariete 23-35 μ crasso, ex hyphis tenuissimis dense parallele dispositis fibrosis contextu flavido vel flavo-brunneolo, ostiolo plano vix vel parum emergente; asci elongato-fusoidei, utrinque attenuati vel superne rotundati, 125-170 × 13-17, octospori, aparaphysati; sporae 2-3-stichae, elongato-clavatae, superne rotundatae, basim versus sensim attenuatae et saepe acutae, melius flagellatae, transverse 8-12-septatae non constrictae, flavidae, 48-70 × 7-8,5. 5565

Hab. ad culmos Schizostachyi acutiflori (Gramineae) et Schiz. sp., pr. Sorsogon (M. Ramos), Bilivan (Mc Gregor), San Antonio (M. Ramos), Alag River, Mindoro (E. D. Merrill), in Ins. Philipp.

BROOMELLA Sacc. — Syll. II p. 557, IX p. 988, XI p. 364, XXII p. 492.

1. **Broomella Zeae** Rehm, Ascom. Philippin, VII in Leaflt. of Philippin. Bot. VIII, 1916 p. 2923. — Perithecia in macula lata dilute rubidula, gregaria, innata, sparsa, mox lineariter, arcte congregata, globulosa, non papillulata, dilute roseola, 0,1 mm. lata, uda per rimas corticis emergentia, excipulo glabro parenchymatice tenuissime contexto, subhyalino; ascis fusiformibus, -50 × 8, 8-sporis. Sporidiis fusiformibus, 1-demum 3-septatis, hyalinis, 12-14 × 3-4, distichis. Paraphysibus mucosis. 5566

Hab. ad emortuum calamum Zeae maydis (Graminaceae), Los Baños, Ins. Philipp. (M. B. Raimundo).

GIBBERELLA Sacc. — Syll. II p. 552, IX p. 988, XI p. 363, XIV p. 649, XVI p. 599, XVII p. 813, XXII p. 492.

1. **Gibberella acerina** Massa, Annali di Bot. v. X, 1912, p. 423, tab. IV fig. 3. — Peritheciis obovatis, piriformibus, v. irregulariter subglobosis, majusculis, vertice papillatis, contextu fusco-violaceo confertissimis, caespitulos 2 mm. et ultra formantibus, subsuperficialibus, basi stromate celluloso purpureo-fusco carnoso insidentibus; ascis oblongo-clavatis, stipitatis octosporis, plerumque 80 × 18; sporidiis subdistichis rectis oblongo-fusoideis, obtusis, triseptatis septis constrictis, 24 × 7, hyalinis; paraphysibus nullis. 5567

   Hab. in ramis corticatis Aceris campestris (Aceraceae), Vercelli, Italiae bor. (Cesati, 1842). — *G. pulicari* (Fr.) et *G. moricolae* (De Not.) affinis.

2. **Gibberella creberrima** Syd., Enum. Philipp. Fungi II, in Philipp. Journ. of Sci. VIII (1913) p. 493. — Peritheciis gregariis, saepe seriatim dispositis, superficialibus, caulem longe lateque obtegentibus, caespitoso-confluentibus et concrescentibus, coriaceo-submembranaceis, leniter verrucosis, ovoideis, demum apice cupuliformiter collapsis, basi contracta saepe subpedicellatis, atris, 150-275 × 120-200, papillatis, contextu parenchymatico pallide violaceo e cellulis 8-12 μ diam. composito; ascis clavatis, sessilibus, 70-100 × 12-20, octosporis, indistincte paraphysatis; sporidiis oblique monostichis vel saepius distichis, ellipsoideo-oblongis, utrinque rotundatis, 3-septatis, ad septa non constrictis, hyalinis, guttulatis, 18-22 × 7-9. 5568

   Hab. in caulibus vivis Scleriae sp. (Cyperaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (Baker).

3. **Gibberella longispora** A. Maublanc, Bull. Soc. Mycol. de Fr., XXXVI, 1920, p. 37, tab. III fig. 9-13. — Maculis diffusis, castaneis. Stromatibus minutis (circ. 0,5 mm. diam.), gregariis, et secundum lineas longitudinales dispositis, erumpentibus superficialibusque, rugulosis, coriaceis, intus pallidis, cortice atro-purpurea praeditis, contextu celluloso. Peritheciis e stromatibus oriundis, demum subliberis, globosis, circ. 200 μ diam., poro apicali non exserto praeditis, tunica 40-60 μ crassa, cum stromatem confluente; ascis fusoideo-clavatis, mox diffluentibus, 60 × 15, aparaphysatis (?). Sporidiis in ascis fasciculatis, fusiformi-oblongis, rectis vel paulo curvulis, continuis, dein medio tenuissime 1-septatis, demum 2-3-septatis, utrinque obtusiusculis, sed mox in ascis apiculo brevi, obtuso, subapicali praeditis, hyalinis guttulatis granulosisque, 35-48 × 4-4,5. Stromatibus conidiiferis (*Fusarium*) immixtis, erumpentibus, obscure purpureis, pulvinatis, cellulosis; sterigmatibus ad apicem cellula- 5569

rum superficialium verticillatis, elongatis; conidiis acrogenis, primum rectis, dein praesertim ad apicem arcuatis et interdum fere hamatis, sursum acutiusculis, basi obtusis et subtruncatis, continuis, dein 2-3 tenuissime septatis, hyalinis, guttulatis, 40-50 × 3.

Hab. in foliis Olyrae sp. (Graminaceae), Rio-de-Janeiro, Brasiliae.

4. **Gibberella briosiana** Turconi et Maffei, Rendic. Accad. Lincei, ser. 5ª XXI (1912) p. 248 et in Atti Ist. Bot. Pavia XV p. 148, tab. V fig. 9-17 (extr. 1912).— Peritheciis rariter binis aut paucis, plerumque compluribus, botryose aggregatis atque in acervulos erumpentes verruciformes congestis, ovatis vel ovato-globosis, 200-250 μ diam., contextu celluloso parenchymatico atro-cyaneo, hypostromate quoque parenchymatico caerulescente insidentibus; ascis cylindraceis vel cylindraceo-subclavatis, breve pedicellatis, 80-100 × 18-20, octosporis, aparaphysatis; sporidiis distichis, obovatis vel ellipsoideis, triseptatis, ad septa non vel leniter constrictis, 16-20 × 6-8, hyalinis. — Adest status conidicus formam *Fusarii* sistens; sporodochiis mox erumpentibus, pulvinatis, rotundatis vel ellipsoideis, vel etiam sublinearibus, quandoque in series longitudinales 1-2 cm. longas confluentibus, pallide carneis; conidiophoris verticillatim ramosis; conidiis acrogenis, fusoideis, curvatis, utrinque acutatis, plerumque 3-5-varius 6-septatis, hyalinis, 40-60 × 4-6. 5570

Hab. in ramulis Sophorae japonicae (Leguminosae), cui noxium, in horto botan. Ticinensi, Italia bor.

5. **Gibberella pulicaris** Rick.— Sacc., Syll. II p. 552 — var. **subtropica** Rehm in Theissen, Ann. Mycol. IX, 1911, p. 63.— Peritheciis 215-260 × 175-190; ascis clavatis 58-72 × 12-13; sporis quadrilocularibus demum septo constrictis, 20-26 × 5-5,5; conidiis curvulis, 5-7 septatis, 42-55 × 5. 5571

Hab. in ramulis putrescentibus, Rio Grande do Sul, Brasiliae.

6. **Gibberella rugosa** T. Petch, Hypocr. zeyl. in Ann. R. Bot. Gard. Peradeniya v. VII, P. II, 1920, p. 136.— Peritheciis solitariis v. usque 6 aggregatis, erumpentibus stromate superficiali destitutis, basi quandoque myceliо albido tenui praeditis, minutis 0,15 mm. diam., ovoideis v. clavatis, rugoso-verrucosis, nigris v. coeruleis, parietibus obscure violaceis, ostiolo non prominenti; ascis ovato-clavatis, octosporis 64-72 × 14-18; sporidiis distichis e anguste-ovoideis subcymbiformibus, 3-septatis septo non constrictis, utrinque rotundatis, hyalinis, 18-24 × 6-8 raro 32 × 8. 5572

Hab. ad ramos dejectos, Peradeniya, Ceylon, Asia.

Sect. 7. Hyalodictyae

PLEONECTRIA Sacc. — Syll. II p. 559, IX p. 990, XVII p. 814, XXII p. 493.

1. **Pleonectria heveana** Sacc., Notae Mycol. XXIV p. 13 (Bull. Orto bot. Napoli 1918). — Peritheciis gregariis v. subsparsis v. paucis acervulatis, superficialibus, globulosis, circ. $^1/_4$ mm. diam., mox collabescendo umbilicato-scutellatis, fusco-sanguineis, contextu parenchymatico, rubescenti; ascis crasse clavatis, apice obtuse tenuatis, infra sensim brevissime stipitatis, aparaphysatis, 65-70 × 12, octosporis; sporidiis ovato-oblongis, 3-5-septato-muriformibus, 17-18 × 8, hyalinis, ad septa non v. vix constrictis. 5573

Hab. in cortice truncorum putrescenti Heveae brasiliensis (Euphorbiaceae) cultae, Singapore (Baker). — Ab affini *Pleon. berolinensi* differt ascis clavatis, sporidiis distichis, 2-5-septato-muralibus.

2. **Pleonectria appendiculata** Vouaux, Bull. Soc. Mycol. de Fr., 1912, p. 193. — Peritheciis numerosis, sparsis, superficialibus, pallide aurantiacis, sphaeroideis v. ovoideis supra obtuse conoideis, 125-150 μ lat. 150-300 μ altis, ostiolo simplici saturatius colorato, contextu plectenchymatico-prosenchymatico ex hyphis 3-6 μ cr. formato; ascis cylindraceis breviter pedunculatis, octosporis, saepe etiam esasporis, v. tetrasporis, 68-140 × 13-17; paraphysibus valde irregularibus mox evanidis, roseolis; sporis monostichis, irregularibus hyalinis primum 1-dein 3-septatis demumque septo longitudinali plus minus evoluto praeditis; ad septa constrictis, ovoideis v. late fusoideis, rectis v. curvulis, multiguttulatis, 20-23 × 9-12, utrinque appendice filiformi recta v. curvula, 4-12 × 1, post maturitatem evanida donatis. 5574

Hab. in thallo tenui ignoto ad truncos vetustos Quercinos prope Docelles Vosges, Gallia (Harmand). — *Paranectriae affinis* (Desm.) Sacc. proxima.

3. **Pleonectria riograndensis** Theissen, Ann. Mycol. IX, 1911, p. 64, tab. V fig. 30, 31, VI fig. 53. — Peritheciis discretis, gregariis, prorumpentibus, globosis, asperulis, rubris, 420-480 μ diam. primo papilla rotundata praeditis, dein umbilicatis, collabescentibus; ascis juvenilibus elongatis tenuibus, maturescentibus clavatis, plus minusve pedicellatis, p. sp. 75 × 25, sporis oblique dispositis, pedicello tenui, 30-40 μ longo, abrupte in clavam dilatato, vel magis aequaliter elongatis usque 100 × 16. sporis recte distichis et tunc fere 5575

sessilibus; sporis ellipsoideis, utrinque obtusissime rotundatis, hyalino-viridulis, muriformibus, septis tamen indistinctis, 24-30 × 10-13.

Hab. in cortice cujusdam, Sao Leopoldo, Rio Grande do Sul, Brasiliae (Rick).

MEGALONECTRIA Speg.— Syll. V p. 560, IX p. 992, XVI p. 599, XVII p. 815, XXII p. 495.

1. **Megalonectria pseudotrichia** (Schw.) Speg.— Syll. Fung. II p. 660.— 5576
var. **oligospora** Sacc., Philipp. Journ. of Sc. Manila, P. I, 1921, p. 599.— Ascis tetrasporis, 90-105 × 18; sporidiis 30-35 × 12, cribroso-6- ad 7-septatis, dilutissime fuscis.

Hab. in cortice indeterm., Cina.

Sect. 8. Scolecosporae

OPHIONECTRIA Sacc. — Syll. II p. 563, IX p. 994, XI p. 365, XIV p. 651, XVI p. 601, XVII p. 815, XXII p. 497.

1. **Ophionectria lagunensis** Sydow, Ann. Mycol., 18., 1920, p. 100. — 5577
Mycelium superficiale ex hyphis longiusculis simplicibus septatis dilutissime fuscidulis 4-5 μ crassis compositum; perithecia in mycelio superficialia, basi hyphulis mycelii circumdata ibidemque hyphulis aliis dilutissime fuscidulis vel subhyalinis obtusis breviori-bus laxe obsita, ceterum glabra, levia, plus minus dense gregaria, ovato-globosa, usque 350 μ alta, 240-280 μ lata, pallide ochracea, in sicco obscuriora, vertice obtusa, non ostiolata, contextu tenui e cellulis 12-16 μ diam. composito; asci tereti, brevissime stipitati, 100-130 × 16-18, ad apicem obtusi, 8-spori; sporae fusoideo-aciculares, utrinque acutiusculae, hyalinae, 6-10-septatae, 45-60 × 2-3.

Hab. in ramis emortuis Homonoyae riparіae (Euphorbiaceae), Mt. Maquiling, Laguna, Ins. Philippin. (O. D. Reinking).

2. **Ophionectria erinacea** Rehm, Ascomyc. Philipp. I in Philipp. Journ. 5578
of Sci. VIII (1913) p. 182. — Peritheciis in maculis epiphyllis vix conspicuis latissime flavidulis botryose 3-10 arcte congregatis sessilibus, globulosis, 100 μ latis, hyalinis, parenchymatice contextis setis plurimis, rectis, subacutatis, non septatis, glabris, crasse tunicatis medio canaliculatis, 50-100 × 5-6, inprimis ad apicem obsessis; ascis cylindraceo-clavatis, apice rotundatis, sessilibus, crasse tunicatis, octosporis, usque ad 100 × 12; sporidiis subacicularibus, utrinque valde acutatis, subcurvatis, hyalinis, 10-12-cellularibus, usque ad 70 × 3, parallele positis; paraphysibus filiformibus ad api-

cem ramosulis, hyalinis, 1,5 μ crassis.

Hab. in foliis vivis Bambusae Blumeanae (Graminaceae), Luzon, prov. Laguna, Los Baños, ins. Philipp. (C. F. BAKER).

3. **Ophionectria Palmarum** Torrend, Champ. Congo belge, in Bull. Jard. 5579
Bot. Bruxelles IV, 1 (1913) p. 8. — Peritheciis gregariis, sessilibus, globulosis, ochraceis vel flavido-melleis, 200 μ diam., ad maturitatem aureo-furfuraceis; ascis fusoideis, 50-70 × 16, indistincte paraphysatis; sporidiis lineari-fusoideis, longitudinaliter parallelis vel subdistichis, 40-45 × 4-5, extra ascum saepius curvulis, 4-5-septatis, hyalino-viridescentibus.

Hab. ad folia et fragmenta Palmarum, Kisantu, Congo (H. VANDERYST).

TRICHONECTRIA Kirschst. — Syll. XXII p. 498.

1. **Trichonectria bambusicola** Rehm, Ascomyc. Philipp. V, Leaflets of 5580
Philipp. Botany, VI (1914) p. 2226. — Peritheciis in hypophyllo dilute flavido-maculato caespitose 6-8 arcte congregatis, globulosis, haud perspicue ostiolatis, hyalino-roseolis, 100 μ diam., parenchymatice tenuiter ex cellulis 9 μ circ. latis contextis, setis plurimis rectis, obtusis, hyalinis, non septatis, 90 μ usque longis, 9 μ cr. obsessis; ascis cylindraceis, apice rotundatis, 100-120 × 12; paraphysibus ramosis 1 μ circ. crassis; sporidiis aciculatis, apice superiore obtusis, rectis, hyalinis, 5-7-septatis, parallele dispositis, 80 × 2.

Hab. in foliis Bambusae Blumeanae (Graminaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (S. A. REYES).

TRAILIA Sutherland, Trans. Brit. Myc. Soc. V pt. I, 1914, p. 149 (1915). — Stroma nullum. Perithecia simplicia, matrice immersa, mollia, alba vel pallida, ostiolo longissimo, anguste cylindraceo, recto vel curvato instructa. Asci cylindracei octospori aparaphysati. Sporidia hyalina, filiformia, fastigata, septata, in asco duplicata contortaque.

1. **Trailia Ascophylli** Sutherl., l. cit., tab. 3 fig. II. — Mycelio hyalino; 5581
peritheciis confertis vel sparsis, thallo regionibus inaequaliter atris factis immersis, subglobosis v. clavatis, 50-60 μ diam., mollibus, albis, ostiolo longissimo, angusto, recto v. curvato, 300-450 × 7,5-10,5; ascis cylindraceis, contortis, octosporis, 45-50 × 9, aparaphysatis; sporidiis hyalinis, filiformibus, in exilitatem fastigatis, septatis, ascum duplo longioribus et igitur in asco duplicatis contortisque.

Hab. in thallo Ascophylli nodosi (Algae), Orkney, Scotia.

OOMYCES B. et Br. — Syll. II p. 564, XVI p. 606, XXII p. 501.

1. **Oomyces caespitosus** Syd., Ann. Mycol. 14., 1916, p. 86. — Stromatibus dense caespitosis et greges 1-2,5 cm. longos culmum ambientes formantibus, oblongis, erectis, usque 1 $^1/_4$ mm. longis, apice parum attenuatis, ochraceo-flavis vel obscure ochraceo-flavis, carnosis, perithecium unicum elongatum includentibus; ascis cylindraceis, aparaphysatis, apice obtusis et hyalino-calyptratis, 350-400 × 18-30, 6-8-sporis, sporidiis filiformibus, rectis vel flexuosis, 30-45-septatis, non constrictis, hyalinis, utrinque obtusis, 250-350 × 4,5-6,5, loculis non secedentibus. 5582

Hab. in culmis Gaduae Weberbaueri (Graminaceae), Seringal, Auristella, Rio Acre, Peruvia.

TORRUBIELLA Bond. — Syll. IX p. 994, XI p. 365, XVII p. 816, XXII p. 502.

1. **Torrubiella tomentosa** Pat. — Syll. XI p. 365. — var. **citrina** Pat., Bull. Soc. Mycol. de Fr., 1913, p. 226. — A typo differt colore citrino et perithecis forma ovoidea donatis. 5583

Hab. ad Coccidas in foliis dejectis Bambusae (Graminaceae), Chi Né Tonkin, Cinae (Dupont).

MICRONECTRIA Speg. — Syll. IX p. 996, XVI p. 602.

1. **Micronectria montenegrina** Bubák, III Beitr. Pilz. Montenegro, in Botanikai Közlemények, 1915 (p. 53). — Perithecis cortici immersis, eum et epidermidem pustuliformiter elevantibus, dein apice globoso-conico, furfuraceo erumpentibus, applanato-conicis, ca. 0,5 mm. in diam., contextu molli, basi tenui, subhyalino, apice crasso, extus atro-viridi, intus viridi usque subhyalino, plectenchymatico; ascis cylindraceis, usque 200 × 8-10, crassiuscule tunicatis, apice rotundatis et parum incrassatis, basi breve pedicellatis, octosporis; sporidiis filiformibus, usque 180 × 1-1,25 septatis, hyalinis, paraphysibus creberrimis, sporis simillibus obvallatis. 5584

Hab. ad caules emortuos Euphorbiae tinctoriae (Euphorbiaceae), Njegusi, Montenegro.

2. **Micronectria Eugeniae** T. Petch, Hypocr. zeyl. in Ann. R. Bot. Gard. Peradeniya v. VII P. II, 1920, p. 137. — Maculis flavis ostiolis albis signatis; perithecis hypophyllis mesophyllo immersis, epidermidem elevantibus sed non erumpentibus, sparsis, globosis, v. lateraliter ovoideis, supra conoideis 0,15 mm. diam.; parietibus crassis flavis v. flavo-brunnescentibus demum prope ostiolos brunneo- 5585

nigricantibus; ascis oblongo-clavatis apice truncatis breviter pedicellatis, octosporis, 120 × 12, sulcatulis, paraphysibus linearibus apice quandoque inflatis obvallatis; sporidiis parallele fasciculatis, hyalinis linearibus apicibus truncatis, obscure septatis, 80-96 × 2.

Hab. in foliis Eugeniae sp. (Myrtaceae), Hakgala, Ceylon, Asia.

HYPOCRELLA Sacc. *) — Syll. II p. 579, IX p. 1002, XI p. 367, XIV p. 653, XVI p. 603, XVII p. 817, XXII p. 503.

1. **Hypocrella disjuncta** Seaver, Mycologia 12, 1920, p. 97. — Stromatibus tuberculatis basi leniter constrictis maturis pallide griseis; ascis apice capitatis ad medium inflatis; sporidiis juventute filiformibus sed mox in asco articulatis et disjunctis et tunc ascis apparenter polysporis. 5586

Hab. in foliis Bignoniae unguis (Bignoniaceae), Naguabo Porto Rico (J. R. Johnston et J. A. Stevenson).

2. **Hypocrella melaena** Syd., Enum. Philipp. Fungi II, in Philipp. Journ. of Sci. VIII (1913) p. 494. — Stromatibus hypophyllis, ad nervos evolutis, solitariis vel saepius aggregatis et confluentibus, magnis, rotundatis, pulvinatis, 2-8 mm. diam., confluendo subinde etiam majoribus, lata basi sessilibus, quoad crassitudinem variabilibus, sive planis sive medio plus minusve convexis, levibus, glabris, aterrimis, opacis, intus albido-lignosis; peritheciis monostichis, omnino immersis, globoso-conicis, 150-225 μ diam., in quoque stromate numerosissimis; ascis cylindraceis vel clavato-cylindraceis, apice rotundatis, deorsum pedicellatis, 120-145 × 8-14; sporidiis mox jam in asco in segmenta secedentibus, articulis 6-9 × 1-1,5, hyalinis. 5587

Hab. in foliis Dilleniae philippinensis (Dilleniaceae), Luzon, Prov. Laguna, San Antonio, ins. Philipp. (Ramos). — Species peculiaris, facile dignoscenda.

3. **Hypocrella caulium** (Berk. et Curt.) Pat., Bull. Soc. Mycol. Fr. 1914, p. 346. — Huc ducenda est *Hypocrella camerunensis* Henn. — Syll. XIV p. 654. — quae nil est nisi status evolutus *Corticii caulium* Berk. et Curt. — Syll. VI p. 612. 5588

Hab. in caulibus Filicum (Filices), Doungou et ad ramulos

*) Quoad genera *Hypocrella* et *Aschersonia* cfr. Petch, The genera Hypocrella and Aschersonia a preliminary Note, in Ann. of R. Bot. Garden Peradeniya, Sept. 1914.

indefinitos, Lizanga, Congo, Africa trop., parasitice ut videtur Coccidearum.

4. **Hypocrella vilis** Syd., Ann. Mycol. 15., 1917, p. 215. — Stromata 5589
epiphylla, sparsa rotundata, minuta, 0,5-1 mm. diam., flavida, leniter convexa, subiculo membranaceo, albido cincta; perithecia ubique in stromate evoluta, numerosa, immersa, ostiolis obscure rufo-succineis prominentibus; ascis tenuibus, cylindraceis, 4-5 μ crassis; sporae facillime jam in asco in segmenta oblonga vel oblongo-cylindracea, 5-6 μ longa 2 μ lata, hyalina secedentes.

Hab. in foliis Schizostachyi sp. (Graminaceae), Angat pr. Bulacan, Luzon, Ins. Philipp. (M. Ramos).

5. **Hypocrella phyllophila** Theissen, Ann. Mycol. IX, 1911, p. 66, tab. 5590
V fig. 51, VI fig. 54. — Stromatibus 0,5-1 mm. diam. primo griseis, dein brunneis, nigrescentibus, amphigenis, plerumque hypophyllis, sessilibus, sphaeroideis v. latiore basi affixa hemisphaericis; superficie perithecis maturis acute subprominentibus, colliculoso-scabris, intus farctis, albo-cremeis, duriusculis, pseudo epidermide ex hyphis densius contextis formata brunnea, 40-50 μ cr.; perithecis ovato-botuliformibus, usque ad 450 × 200, parietibus in sectione rubro-brunneis; ascis cylindraceis v. e medio tumidulo in utrimque partem sensim attenuatis, 150-180 × 8-10,5, operculo delicatissimo; sporis filiformibus, mox in articulos bacillares, utrinque rotundatos, 8 μ longos secedentibus.

Hab. in foliis Myrtaceae, Sao Leopoldo Rio Grande do Sul, Brasiliae (Rick). — Differt ab *H. ochracea* colore, insertione stromatum, articulisque sporarum minoribus.

6. **Hypocrella plana** Sydow, Engler' Botan. Jahrbüch., 54., 1916, p. 5591
257. — Stromatibus albis, dein ochraceo-flavidis, planis, tenuiter discoideis, singulis orbicularibus, 2-4 mm. diam., sed saepe confluendo majoribus et irregularibus, ca. $^1/_3$ mm. tantum crassis, ostiolis minutissimis flavo-brunneis vix visibilibus punctatis; perithecis omnino immersis, ovoideis, minutis, ascis cylindraceis 5-7 μ latis, octosporis, aparaphysatis; sporidiis filiformibus, longitudine ascorum, extra ascos in articulos cylindraceos 6-8 × 1-1,5 hyalinos secedentibus.

Hab. in foliis vivis Piperis sp. (Piperaceae), ad flum. April, Nova Guinea nord-or. Africae (Ledermann).

7. **Hypocrella libera** Syd., Ann. Mycol. 14., 1916, p. 85. — Stromatibus 5592
in Coccidis parasiticis, lenticularibus vel irregularibus, sed haud globulosis, planiusculis, 2-6 mm. diam., hinc inde confluentibus,

ochraceis; peritheciis numerosis in quoque stromate et valde exsertis, fere omnino liberis elongatis, medio ventricosis, 0,5-1 mm. longis, in media parte $^1/_3$-$^1/_2$ mm. crassis, ochraceis; ascis cylindraceis, apice obtusis, et hyalino-calyptratis, 300-350 × 10-15, octosporis; sporidiis filiformibus, hyalinis, jam in asco in articulos numerosissimos oblongos vel oblongo-fusoideos utrinque leniter attenuatos, 13-17 µ longos 2-3 µ latos, secedentibus.

Hab. in Coccidiis (Insecta) ad folia dejecta, Cobija, Rio Acre Bolivia (E. Ule).

8. **Hypocrella ambiens** Theissen, Ann. Mycol. IX, 1911, p. 69, tab. V fig. 42, VII fig. 71. — Stromatibus tuberculatis, ramulum plus minusve ambientibus, pluribus arcte aggregatis et fere connatis, 3-10 mm. diam., extus nigerrimis opacis, ob ostiola prominula dense dilateque asperulis et ob mammillas irregulariter hinc inde extantes crassius colliculosis, intus farctis albis, aetate vero lignicoloribus, plus minusve eroso-excavatis; peritheciis immersis botuliformibus, collo longiusculo, usque 350 µ long. (ipsâ perithecii cavitate ca. 240-280 × 170-190), stratum pseudo-epidermale nigrum, 35-40 µ cr. perforantibus; ascis anguste cylindraceis 145-165 × 6-7, operculo minutissimo hemisphaerico; sporis filiformibus, in asco in articulos 8-10,5 µ long., utrinque angustato-rotundatos secedentibus. 5593

Hab. in ramis siccis, Rio Grande do Sul, Brasiliae.

9. **Hypocrella turbinata** (Berk.) Seaver, de qua cnfr. Cl. Seaver in Mycologia 12., 1920, p. 96. 5594

10. **Hypocrella sphaeroidea** Sydow, Engler' Botan. Jahrbüch. 54., 1916, p. 256. — Stromatibus globulosis vel applanato-globosis, 3-7 mm. diam., compactis, pulvinatis, sordide flavis, vel flavo-brunneis, superficie primitus leniter pulverulentis; ostiolis minutissimis, subatris; peritheciis omnino immersis, ubique dense aequaliterque dispositis, globulosis, exiguis, 80-100 µ diam., collo minuto praeditis, usque 150 µ altis, distiche stipatis; ascis cylindraceis, 70-130 × 9-12, aparaphysatis; sporidiis jam in asco in articulos oblongos utrinque obtusos continuos hyalinos 5-8 × 2 secedentibus. 5595

Hab. in ramulis plantae ignotae, « Felsspitze » Nova Guinea nord-or., Africae (Ledermann).

11. **Hypocrella insignis** Sydow, Engler' Botan. Jahrbüch. 54., 1916, p. 256. — Stromatibus superficialibus, sessilibus planis, discoideis, ambitu orbicularibus, 0,5-1,5 cm. diam., centro $^3/_4$-1 mm. crassis, marginem versus $^1/_2$ mm. tantum crassis, vivide cinnabarinis, subtus luteo-ochraceis, areola minuta centrali 1-2 mm. lata matrici affixis, 5596

carnosis, intus pallidis ; peritheciis ubique plus minus aequaliter distributis, densiuscule stipatis, globulosis vel irregularibus, basi 200-400 μ diam., superne in collum breve attenuatis ; ostiolis minutissimis, exiguis, non vel vix prominentibus, subatris; ascis cylindraceis, ad apicem rotundatis, 140-200 × 10-15, octosporis, aparaphysatis ; sporidiis filiformibus, ascum longitudine aequantibus, in eodem asco mox in articulos cylindraceos 5-8 μ longos, 1,5 latos secedentibus ; conidiis simul praesentibus acicularibus, continuis, utrinque acutis, hyalinis, 9-11 × 1 ; basidiis dense stipatis, hyalinis, 10-16 × 1.

Hab. ad folium dejectum, Lordberg, Etappenberg, Nova Guinea nord-or., Africae (LEDERMANN).

12. **Hypocrella aurea** Sydow, Engler's Botan. Jahrbüch. 54., 1916, p. 256. — Stromatibus amphigenis, sparsis, irregulariter hemisphaericis usque globulosis, pulvinulatis, $^3/_4$-2 mm. diam., saepe leniter lobulatis, vivide aureis ; peritheciis ovatis, omnino immersis, minutis, ostiolis obscure rufis ; ascis cylindraceis, 130-160 × 9-12, aparaphysatis ; sporidiis jam in asco in articulos breviter cylindraceos, continuos, hyalinos, 4-7 μ longos 2 μ latos, secedentibus. 5597

Hab. in foliis vivis fruticis cujusdam, « Felsspitze » Guinea nord-or., Africae (LEDERMANN).

13. **Hypocrella orbicularis** Sydow in Theissen, Ann. Mycol. IX, 1911, p. 67. — Ita vocanda est *Hypocrella globosa* Sydow (20 sept. 1907) nec Raciborski (9 jan. 1907). 5598

14. **Hypocrella nutans** (Rick) Theissen, Ann. Mycol. IX, 1911, p. 67. — Ita vocanda est *Mölleriella nutans* Rick. 5599

HYPOCREOPHIS Spegaz., Rel. Mycol. trop. etc. in Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 118. — Stroma superficiale discoideo-scutellatum sessile v. stipitatum carnoso-subceraceum, laeticolor, peritheciis disco supero immersis ac dense constipatis, ostiolis vix prominulis, ascis linearibus aparaphysatis 8-sporis, sporis linearibus pluriseptatis hyalinis, articulis non dissilientibus. — Est *Hypocrea* scolecospora.

1. **Hypocreophis guaranitica** Spegaz., l. c. cum icon. — Stromata superficialia extus sordide flavida, intus alba, orbicularia sessilia, 5-10 mm. diam., superne plana sed centro saepius eximie umbonato-mucronata, punctibus ostiolaribus obscurioribus confertis notata, inferne convexula glaberrima, margine rotundata integra ; peritheciis minutis elliptico-subglobosis 200-250 × 120-150, tunica tenuiter mem- 5600

branacea vestiti, ochroleuci; asci apice subglandiformes, basi breviter tenuiterque attenuato-pedicellati, 200 × 9-10; sporae lineari-subclavulatae, parte media supera crassiore apiceque obtuse rotundata, infera sensim angustiore apiceque acuta, 7-15-septata, 60-100 × 3-5.

Hab. ad cortices dejectos putres Tabebuiae sp. (Bignoniaceae), prope San Lorenzo, Paraguay, America austr. trop. (J. D. Anisitz).

EPICHLOË Tul.— Syll. II p. 578, IX p. 1001, XI p. 367, XIV p. 655, XVI p. 607, XXII p. 507.

1. **Epichloë warburgiana** Mag. — Syll. XI p. 367.— var. **Donacis** Rehm, Ascomyc. Philipp. V, Leaflets of Philipp. Botany, VI (1914) p. 2225. — Stromatibus cylindraceis, apice obtusis, fusco-nigris, subangulosis, crustaceis, 0,5-2 cm. longis, 8 mm. latis, inflorescentiam ambientibus et destruentibus, intus albescentibus; perithecciis innatis, globulosis, ostiolo non emergente sed potius umbilicato, 20-30 μ lato praeditis, in stromate ex hyphis tortuosis, septatis, brunneis, 5 μ latis contexto nidulantibus; ascis cylindraceis (interdum fusiformibus) apice rotundatis, aparaphysatis, 120 × 10-12; sporidiis filiformibus, septatis, hyalinis, parallele dispositis, asci longitudinis, jam in asco in cellulas cylindraceas, 8-10 × 2, plurimas dissolutis. 5601

Hab. ad inflorescentiam Donacis cannaeformis (Graminaceae), Luzon, Prov. Laguna, Los Baños, ins. Philipp. (M. B. Raimundo).

BALANSIA Speg. — Syll. IX p. 999, XI p. 366, XIV p. 656, XVI p. 607, XVII p. 821, XXII p. 509.

1. **Balansia Cyperi** C. W. Edgerton, Mycologia, 11., 1919, p. 260, tab. 12. — In floribus evoluta, sclerotiogena, sclerotiis stipitatis v. sessilibus 1-3 cm. long. demum nigris, induratis papillatis; conidiis e conidiophoris brevibus angustis confertis sclerotiicolis efformatis, rectis v. curvulis, longis, angustis, hyalinis, 15-30 × 1-1,8; perithecciis ampullaeformibus collo elongato emergenti praeditis, 480-600 × 120-200; ascis elongatis, angustatis, plerumque rectis sed quandoque etiam curvulis, 160-225 × 7-10; sporis longis, angustis, hyalinis septatis, 100-200 × 1,5-2. 5602

Hab. in inflorescentis Cyperi virentis (Cyperaceae), St. Gabriel Louisiana, Amer. bor. (A. T. Bell et C. W. Edgerton).

2. **Balansia nidificans** P. et H. Syd., Ann. Mycol. X, 1912, p. 81. — 5603

Stromatibus in spicis evolutis, spicis infectis 5-11 mm. long. 2-3 mm. cr. in massam sclerotioideam perduram atram trasmutatis; stromatibus hemisphaericis v. depresso-globosis, 0,5-1 mm. diam., subsessilibus v. basi contracta matrici affixis, duris, atris, dense minuteque granuloso-tuberculatis; peritheciis immersis; ascis cylindraceis ca. 100-150 μ long.; sporidiis ascorum longitudine, $^3/_4$-1 μ cr., extra ascos facile in articulos 9-12 μ long. secedentibus.

Hab. in spicis Cyperaceae, inter Muarab Uja et Kundim baru, Borneo sud-or. (H. Winkler). — Stromate minuto distincta species. Spicis infectis subproliferis.

3. **Balansia Andropogonis** Syd. et Butl., Ann. Mycol. IX, 1911, p. 395.— 5604
Stromatibus in inflorescentiis lignoso-fibroso-mutatis insidentibus, sparsis v. aggregatis, depresso-hemisphaericis v. subdiscoideis 1-2 mm. diam., sessilibus, extus atris, intus pallidis, duriusculis, levibus, vix sub lente valida minute denseque punctulatis; peritheciis obovatis, minutis, immaturis.

Hab. in inflorescentiis Andropogonis aciculati (Graminaceae), Forbesganj, Purnea, Bengalen, India or. (J. H. Burkill).

4. **Balansia asperata** Massee, Bull. Bot. Gard. Kew, 1911, p. 225, fig. 5605
1-7. — Stromatibus stipitatis, hemisphaericis vel subglobosis, infra umbilicatis, asperatis, extus atris, 1 mm. diam.; stipite cylindrico, lignoso-carnosulo, duriusculo, extus atro, sub lente minute squamuloso, 2 mm. circ. longo; peritheciis in stromatis capitulis peripphericis, densissime constipatis; ascis cylindraceis, 100-200 × 7-8, basi attenuatis; sporidiis filiformibus, longitudinem ascorum aequantibus, multiseptatis, hyalinis.

Hab. in inflorescentia Ichnanthi pallentis (Graminaceae), Mount Austin, Johor, Penius, Malacca (Ridley). — Affinis *B. Jungneri* P. Henn. sed in omnibus partibus minor.

5. **Balansia sessilis** Massee, Bull. Bot. Gard. Kew, 1911, p. 225, fig. 5606
8-10. — Stromatibus sessilibus, globulosis, subtus plus minusve angustatis, duris, extra atris et minutissime punctulatis, intus albidis, 1,5-2,5 mm. diam.; peritheciis in stromate peripphericis, densissime constipatis, oblongo-ovatis; ascis cylindraceis, 200-220 × 10-12, tunica apice valde incrassata, basi leniter attenuatis, aparaphysatis; sporidiis filiformibus, longitudinem ascorum fere attingentibus, hyalinis, multiguttulatis dein multiseptatis.

Hab. in inflorescentia Ichnanthi sp. (Graminaceae), Johor: Batu Pahat in penins. Malaccense (Ridley).

6. **Balansia Trichloridis** Speg., Mycet. Argent. VI, Anal. Mus. Nac. 5607

Buenos Aires XXIII (1912) p. 96. — Stromatibus discoideis, sessilibus, matrici vix incrassata leniterque infuscata gregarie insidentibus, parvis, 1-3 mm. diam., planiusculis, non vel vix rugulosis, extus intusque atris, non nitidis, contextu opaco indistincto; loculis ellipsoideo-globosis, confertis, erectis, 200-250 × 120-200, obsolete papillato ostiolatis; ascis cylindraceis, longissimis, 200 × 6, apice rotundatis crasseque tunicatis, basi breviuscule graciliterque pedicellatis, aparaphysatis, octosporis; sporidiis filiformibus, utrinque acutiuscule rotundatis, rectis vel leniter flexuosis, non vel minute multiguttulatis, hyalinis, 120-150 × 1.

Hab. in culmis vivis Trichloridis mendocinae (Graminaceae, circa Mendoza, Argentina. — Species *Plowrightiae* habitu simillima, sed ascorum sporarumque fabrica distinctissima nec quidem comparanda.

OPHIODOTHIS Sacc. — Syll. II p. 552, IX p. 1051, XIV p. 685, XVI, p. 632, XVII p. 859, XXII p. 442. — De hoc cnfr. Theiss. et Syd., Ann. Mycol., 13., 1915, p. 187.

1. **Ophiodothis Elymi** Gz. Frag., Fungi Hort. Madrit. p. 21 fig. 2 (1917).— 5608
Stromatibus superficialibus elongatis, usque ad 1 mm. long., nigris, loculis immersis 1-4 majusculis, 175-350 μ diam., parietibus mediis tenuibus, distincte papillatis, poro pertusis; ascis longe cylindraceis, stipulatis, apice rotundatis 140 × 10, paraphysibus filiformibus; sporidiis fasciculatis filiformibus, rectis v. subflexuosis, ascos subaequantibus, parce septulatis, loculis majoribus pluriguttulatis, loculis inferioribus facile secedentibus.

Hab. in culmis siccis Elymi philadelphi (Graminaceae), in Horto bot. Madrid, Hispaniae (A. Caballero).— Ab *Opiodothide atro-maculanti* diversa.

2. **Ophiodothis Picramniae** Speg., Mycet. Argent. VI, Anal. Mus. Nac. 5609
Buenos Aires XXIII (1912) p. 95. — Stromatibus parenchymate innatis, utrinque perspicuis, repando-angulatis, 1-3 mm. diam., utrinque planissimis, atris, glabris, opacis; loculis hypophyllis, 1-5 in quoque stromate, semilenticularibus, 120-150 μ diam., obsolete ostiolatis, contextu subcarbonaceo, opaco, indistincto; ascis obclavulatis, apice subtruncato-rotundatis crasseque tunicatis, basi brevissime pedicellatis, aparaphysatis, octosporis, 90-100 × 14-16; sporidiis 2-3-stichis, rectis vel leniter inaequilateris, utrinque acutiusculis, continuis vel 4-5-blastis, 40-45 × 4-5, primo tunica mucosa hyalina levi vestitis dein nudis.

Hab. in foliis vivis Picramniae palo amargo (Simarubaceae), prope Puerto Leon, Misiones, Argentina.

CORDYCEPS Fr. *) — Syll. II p. 566, IX p. 998, XI p. 366, XIV p. 656, XVI p. 611, XVII p. 822, XXII p. 510.

1. **Cordyceps Puiggari** Spegaz., Rel. Mycol. trop. etc. in Bol. Ac. Nac. Cienc. Cordoba, t. 23., 1919, Extr. p. 116. — Stromata solitaria; stipite subfiliformi praelongo, 30-60 mm., 0,5 mm. diam., simplice recto v. leniter flexuoso, longitudinaliter rugoso-striato fusco-atro opaco, spatio apicali capitulum duplo quadruplove longiore pallide carneo-luteo terminato; capitulo acrogene solitario eximie elliptico-sublimoniformi parvo, 2-3 × 1,50-1,75 mm., laevissimo, carneo-luteo; peritheciis confertis, horizontali-radiantibus omnino immersis ostiolis etiam plane imperspicuis, 800 × 100; ascis cylindraceis 250 × 6-8; sporis filiformibus in articulis teretibus abbreviatis mox dilabentibus, 5-10 × 1. 5610

Hab. ad cadaver Alleculidei (Lystronychus sp.), inter Bryophytas ad truncos vetustos, prope Apiahy, Brasilia (J. Puiggari). — *C. australi* Speg. et *C. thyrsoide* Moell. affinis.

2. **Cordyceps peltata** Wakefield, Kew Bull. 1916, n. 3, p. 74 c. ic. — Stromate stipitato, stipite ligno omnino immerso, capitulo supra corticem emergente; capitulo peltato, pulvinato, primo pallido, deide rufo-brunneo, margine pallidiore 1-2 processibus sterilibus conicis ad 1 mm. longis praedito, ostiolis obscurioribus vix v. leniter prominulis, punctato, 2-5 mm. v. e fusione 5-7 × 3-4 mm.; stipite brevi pallido e mycelio larvam obtegente oriundo; peritheciis immersis, circ. 0,25 mm. longis; ascis clavatis, longe stipitatis, p. sporif. 100 × 10; sporidiis hyalinis bacillari-fusiformibus, utrinque acutis, multiseptatis, 72-91 × 3-3,5, saepe medio inflexis maturitate in duos articulos secedentibus. 5611

Hab. parasitica in larvis Cryptorhynchi sp. intra Codiei truncum nidulantibus. — An potius ad *Hypocrellae* genus referenda species?

3. **Cordyceps huberiana** P. Henn., Hedw., vol. 48 (1908) p. 105. Stromatibus longe stipitatis, clavula cylindracea, spiciformi, obtusa, 8-9 mm. longa, 1 mm. crassa, flavo-brunneola, stipitibus filiformibus, teretibus, arcuato-flexuosis, rigidis, corneis, atris, levibus, ad 5612

*) Cfr. Lloyd, Synops. of the Cordyc. of Australia, Cincinn. March 1915.

apicem brunneolis, ca. 4 cm. longis, 400-500 μ latis; peritheciis oblongis, omnino immersis; ascis cylindraceis, apice rotundatis, 150-200 × 5-6; sporidiis filiformibus pluriseptatis 2 μ crassis.

Hab. in thorace Megaponerae sp. (Formica), Amazonas, Parà. — *C. rhizomorphae* A. Möll. affinis.

4. **Cordyceps japonensis** Hara, Bot. Mag. Tokyo v. 28., 1914, n. 332, cum icon. — Stromatibus solitariis v. caespitosis, simplicibus, flexuosis, subcompressis, carnosis, aurantiacis, 11,5-25 mm. alt. 1-1,5 mm. cr., apice oblongis v. ovoideo-sphaeroideis, rugosis et peritheciis prominulis dense tectis, 2-3 mm. diam.; peritheciis subimmersis, globosis, ostiolatis; ascis longe cylindraceis v. clavatis, apice rotundatis, stipitatis, octosporis, 130-170 × 5-6; sporis filiformibus, longissimis, pluries septatis, 1,5-2 μ cr., hyalinis. 5613

Hab. ad Formicas varias, Kawauye-mura et Kakumuno-ga-hara Prov. Mino, Japonia.

5. **Cordyceps necator** Pat. et Har., Bull. Soc. Mycol. Fr. 1912, p. 283. — Clavula ovoidea, apice apiculata, flavescente, bullata, 1-1,5 mm. longa, 1 mm. lata, in stipitem concolorem, basi nigricantem 3-4 mill. longum, $^1/_3$ mill. latum, e rhizomorpha atra ad 3 cm. longa, $^1/_2$ mm. crassa, flexuosa, cadaveri formicarum quas enecat inserta nascentem, attenuata; absque ascis et sporis. 5614

Hab. in Formicis emortuis, Guideko, Sassandra, Guineae gallicae, (A. Chevalier).

6. **Cordyceps Tricentri** Yasuda in Lloyd, Myc. Not. 41. p. 568 fig. 775-776 (1916). — Stipite tenui filiformi, 6 cm. longo, 1 mm. cr., capitulo fusoideo, sublevi, 7 × 1,5 mm. nutante stipiteque flavis; peritheciis non prominulis, ceteris notis *Cord. nutantis.* 5615

Hab. in corpore insecti Tricentri, in Japonia (A. Yasuda). — Praecipue colore stipitis et capituli a *C. nutante* differt.

7. **Cordyceps Clavicipitis** Oertegren, Svensk Bot. Tidskr. X (1916) p. 53, et p. 55 fig. 1-3. — Diagnose p. 57: In sclerotiis Clavicipitis purpureae parasitica; stromatibus nunc simul cum stromatibus Clavicipitis, nunc iis suppressis singularibus, numero saepius plurimis, e sclerotiis nutricibus prorumpentibus, non ramosis, subulatis, cum stipite 15,5-23, typice 21-22 mm. longis, 1,2-2 mm. latis parte sporifera stipite duplo longiore, maturis colore externo croceo, interno griseo vel pallide subflavo, juvenilibus colore externo albido, interno aurantiaco signatis; peritheciis maturis quasi superficialibus, re vera sub velamine tenui valde prominentibus, 325-375 μ longis, 150-185 μ latis, pariete quam textura stromatica firmiore, 5616

e colore atro-griseo: ostiolis longe protractis, flavocinctis, sursum papillulis minutis praeditis: ascis fragilissimis, cylindraceis, tenuissimis, 150 μ longis, 2,5-3 μ latis, sursum galericula glanduliformi ornatis, hyalinis; sporis 8-nis, asco parum brevioribus, valde tenuissimis, multiseptatis; paraphysibus raris certe inventis.

Hab. e sclerotio Clavicipitis purpureae ovariorum Secalis cerealis, in paroecia Gunnarskog provinciae suecanae Wermland collectis fungis ille fratricida in horto botanico Universitatis Stokholmiae in cultura prodiit.

ASCOPOLYPORUS A. Möell. — Syll. XVI p. 605, XVII p. 819.

1. **Ascopolyporus Puttemansii** P. Henn., Hedw. vol. 48 (1908) p. 6. 5617
Stromatibus subgloboso-tuberosis vel ungulato-polyporiformibus, basi discoidea adnatis, gelatinoso-carnosis, parte superiore convexa flavo-brunnea fusciđula sterili, inferiore fertili applanata, granuloso ostiolata, 3-4 cm. diam.: perithecis immersis, confertis, oblongo-cylindraceis, 1,5 mm. circ. longis; ascis cylindraceis, vertice obtuso-rotundatis, 4-sporis, 350-400 × 11-12: sporidiis parallelis, cylindraceis, utrinque rotundatis, pluriseptatis, hyalinis, haud dilabentibus, 280-300 × 4-5.

Hab. in culmis Bambusae (Graminaceae), Rio Grande, S. Paulo, Brasilia. — Ab *A. polyporoide* notis variis distinctus.

ACICULOSPORIUM Miyake, Bot. Mag. Tokyo n. 259 (1908), Stud. üb. Pilz. Bamb. in Japan, in litt., VI, 1912 (Etym. *aciculа* ob formam sporarum). — Stroma subcartilagineum, album, lanceolatum: stratum fructiferum laterale irregulariter erumpens, laete coloratum. Perithecia uniseriata, lageniformia, immersa, ostiolis emergentibus. Asci 8-spori aparaphysati; sporidia filiformia, hyalina, stratum conidiophorum immersum loculatum astomum, sporulis filiformibus. Mycelium perennans. — Forte teste Cl. Miyake, cum gen. *Loculistroma* (Patters., Syll. XXII p. 493) imperfecte descripto congruit.

1. **Aciculosporium Take** Miyake, Bot. Magaz. Tokyo, n. 259 p. 305 (1908). 5618
Characteres generis. — Stromate cum matrice concreto, et vagina foliorum semitecto, 5-14 mm. long., 1,2-2 mm. diam., pseudoparenchymatico, cartilagineo, albo; perithecis 375-520 μ alt., 100-125 μ lat. hyalinis; ascis longe cylindraceis 270-330 × 5-6, octosporis; sporidiis filiformibus, 230-300 × 1,5-2, intus minute granulosis, guttulatisque, continuis. — Conidiophoris ramosis, tenuibus, 11-24 × 1,5-1,8; conidiis filiformibus, rectis v. flexis, 35-55 × 1,8-2 e hya-

lino roseis, demum 2-septatis.

Hab. in apice ramorum Phyllostachydis bambusoidis et Ph. puberulae (Graminaceae), Tokyo nec non in Sina austr. — Fungillus cladomanias generat.

HYALOSPHAERA F. L. Stevens, Trans. Illin. Ac. of Sc. v. X, 1917, p. 172 (Etym. a *hyalos* hyalinus et *sphaera*). — Perithecia hyalina et tunc colore sporarum ostendentia : asci paraphysati, sporidia colorata, 2-3 septata.

1. **Hyalosphaera Miconiae** F. L. Stevens. l. c.— Maculae indefinitae, rugoso-circulares supra e pallide flavae 3-10 mm. diam.; infra pallidae et mycelio coriario vestitae centro ob sporidia cinereo-griseae; mycelium ex hyphis 5 μ cr., septatis, ramosis, hyalinis efformatum. Peritheciis levibus, maturis e sphaeroideis ovoideis, hyalinis, translucentibus, juventute omnino clausis maturis apice apertis sed non ostiolatis, 80-100 μ diam., stromate v. subiculo destitutis, parietibus apice 4 μ cr., ascis e clavatis oblongis, obtusis tenuiter tunicatis, numerosis, 8-sporis, paraphysibus numerosis ascos superantibus tenuissimis 1 μ cr. obvallatis; sporidiis linearibus, 2-3 v. plerumque 3-septatis, e fumosis brunneis, 40-57 × 5. 5619

Hab. in foliis Miconiae laevigatae (Melastomataceae), Arecibo, Utuado, Maricao, Aguas Buenas, Ponce, Yabucoa, in Porto Rico, America Centr.

BORINQUENIA F. L. Stevens, Trans. Illin. Ac. of Sc. v. X, 1917, p. 173 (Etym. a *Borinquen* antiquum nomen Portorici). — Perithecia carnosa v. membranacea, ostiolata rubescentia; asci fasciculati, basilares, paraphysati ; sporidia linearia, septata, brunnea.

1. **Borinquenia Miconiae** F. L. Stevens, l. c. fig. 3. — Maculis nullis mycelio e coriario brunneo-superficiali ; peritheciis copiosis, ovoideis, papillatis, hyalinis v. pseudo-parenchymaticis rugosis, praecipue ad basim, pilosis, pilis 180 × 150 cr. ; ascis numerosis cylindraceis 60-65 × 7-8, obtusis, tenuiter tunicatis octosporis, paraphysibus numerosis filiformibus, 1-1,5 μ cr., ascos superantibus obvallatis ; sporidiis linearibus fumosis, guttulatis obtusis, 55-65 × 2-3 plerumque incurvatis, septis non visis. 5620

Hab. in foliis Miconiae laevigatae (Melastomataceae), Arecibo, Utuado, Costa Rica.— Sensu Saccardo ad Hypocr.-phaeoscolecosp. et tunc gen. *Konradia* affinis, sensu vero Lindau ad Hy-

pomycet. referendum et cum gen. *Globulina* et *Torrubiella* comparandum.

DEXTERIA F. L. Stevens, Trans. Illin. Ac. of Sc. v. X, 1917, p. 174 (Etym. a Cl. Dr. E. G. DEXTER cui dicatum). — Mycelium omnino v. fere superficiale; perithecium astomum, parietibus tenuissimis v. collabescentibus praeditum, maturum ascos ostendens. — Gen. *Calonectriae* affinis sed habitu et parietibus peritheciorum diversum.

1. **Dexteria pulchella** F. L. Stevens, l. c., fig. 4. — Mycelio hypophyllo, 5621
rubescenti, superficiale sparsum; maculis nullis; peritheciis 18-25 ascos continentibus, maturis translucidis, stratu myceliali circumdatis; ascis e clavatis ovoideis v. ellipsoideis 50 × 15-22, octosporis, obtusis tenuiter tunicatis, paraphysibus nullis; sporidiis linearibus hyalinis 5-septatis, 35-42 × 4-5; pycnidiis conformibus sed latioribus et obscurioribus, 110-130 μ diam.; conidiis linearibus, 17-21 × 3, 3-septatis.

Hab. in foliis Paullinia e pinnatae (Sapindaceae), Mayaguez, Porto Rico, Amer. Centr.

ERRATA-CORRIGE: *Dimerosporium*, cum specie *Dim. Triumphettae* Arn. (p. 478), ad pag. 242 et ad finem generis transferenda.